4.3.1430 Width_for_annotation_curve to Numeric_value

Each Width_for_annotation_curve has exactly one Numeric_value as the describing object. Each Numeric_value is the describing object for zero, one or many Width_for_annotation_curve.

5 Application interpreted model

5.1 Mapping table

This clause contains the mapping table that shows how each UoF and application object of this part of ISO 10303 (see clause 4) maps to one or more AIM constructs (see annex A). The mapping table is organized in five columns.

- Column 1) Application element: Name of an application element as it appears in the application object definition in 4.2. Application object names are written in uppercase. Attribute names and assertions are listed after the application object to which they belong and are written in lower case.

- Column 2) AIM element: Name of an AIM element as it appears in the AIM (see annex A), the term 'IDENTICAL MAPPING', or the term 'PATH'. AIM entities are written in lower case. Attribute names of AIM entities are referred to as <entity name> . <attribute name>. The mapping of an application element may result in several related AIM elements. Each of these AIM elements requires a line of its own in the table. The term 'IDENTICAL MAPPING' indicates that both application objects of an application assertion map to the same AIM element. The term 'PATH' indicates that the application assertion maps to the entire reference path.

- Column 3) Source: For those AIM elements that are interpreted from the integrated resources, this is the number of the corresponding part of ISO 10303. For those AIM elements that are created for the purpose of this part of ISO 10303, this is the number of this part. For those AIM elements that are directly incorporated from an application interpreted construct (AIC) this is the AIC reference.

- Column 4) Rules: One or more numbers may be given that refer to rules that apply to the current AIM element or reference path. For rules that are derived from relationships between application objects, the same rule is referred to by the mapping entries of all the involved AIM elements. The expanded names of the rules are listed after the table.

- Column 5) Reference path: To describe fully the mapping of an ARM element, it may be necessary to specify a reference path through several related AIM elements. The reference path column documents the role of an AIM element relative to the AIM element in the row succeeding it. Two or more such related AIM elements define the interpretation of the integrated resources that satisfies the requirement specified by the application object. For each AIM element that has been created for use within this part of ISO 10303, a reference path up to its supertype from an integrated resource is specified.

For the expression of reference paths the following notational conventions apply:

a) `[]` : multiple AIM elements or sections of the reference path are required to satisfy an information requirement;

b) `()` : multiple AIM elements or sections of the reference path are identified as alternatives within the mapping to satisfy an information requirement;

c) `{}` : enclosed section constrains the reference path to satisfy an information requirement;

d) `->` : attribute references the entity or select type given in the following row;

e) `<-` : entity or select type is referenced by the attribute in the following row;

f) `[i]` : attribute is an aggregation of which a single member is given in the following row;

g) `[n]` : attribute is an aggregation of which member `n` is given in the following row;

h) `=>` : entity is a supertype of the entity given in the following row;

i) `<=` : entity is a subtype of the entity given in the following row;

j) `=` : the string, select, or enumeration type is constrained to a choice or value;

k) `\` : the line continuations for strings that wrap.

Table 7 – Mapping table activity UoF (uof01)

Application element	AIM element	Source	Rules	Reference path
ACTIVITY #1: if activity is a specific activity #2: if activity is a typical activity An activity can be one of: an 'assess' activity a 'design' activity a 'transfer material' activity a 'transform material' activity	#1: (action) #2: (action_method)	41 41	1	{#1: (action action = class_of_activity_item) #2: (action_method action_method = class_of_activity_item) class_of_activity_item <- plant_functional_class_of_activity_assignment.items[i] -> plant_functional_class_of_activity_assignment <= group_assignment group_assignment.assigned_group -> group (group.name = 'assess') (group.name = 'design') (group.name = 'transfer material') (group.name = 'transform material')}
CLASS_OF_ACTIVITY #1: if class_of_activity is user defined #2: if class_of_activity is defined in this part of ISO 10303 #3: if class_of_activity is externally defined	#1: (class_of_activity) #2: (standard_class_of_activity) #3: (externally_defined_class_of_activity)	221 221 221		#1: (class_of_activity <= group) #2: (standard_class_of_activity <= [class_of_activity <= group] [pre_defined_item]) #3: (externally_defined_class_of_activity <= [class_of_activity <= group] [externally_defined_item])

Table 7 (– Mapping table activity UoF (uof01)) continued

Application element	AIM element	Source	Rules	Reference path
CLASS_OF_INVOLVEMENT #1: if class_of_ involvement is user defined #2: if class_of_ involvement is defined in this part of ISO 10303 #3: if class_of_ involvement is externally defined	#1: (class_of_ involvement) #2: (standard_class_of_ involvement) #3: (externally_defined_ class_of_involvement)	221 221 221		#1: (class_of_involvement <= group) #2: (standard_class_of_involvement <= [class_of_involvement<= group] [pre_defined_item]) #3: (externally_defined_class_of_involvement <= [class_of_involvement<= group] [externally_defined_item])
CLASSIFICATION_OF_ ACTIVITY	plant_functional_class_of_ activity_assignment	221		plant_functional_class_of_activity_assignment <= group_assignment
classification_of_ activity to activity (as classified) #1: if activity is a specific activity #2: if activity is a typical activity	PATH			plant_functional_class_of_activity_assignment plant_functional_class_of_activity_assignment.items[i] ->> class_of_activity_item #1: (class_of_activity_item = action action) #2: (class_of_activity_item = action_method action_method)
classification_of_ activity to class_of_ activity (as classifier) #1: if class_of_activity is user defined #2: if class_of_activity is defined in this part of ISO 10303 #3: if class_of_activity is externally defined	PATH			plant_functional_class_of_activity_assignment <= group_assignment group_assignment.assigned_group -> group => #1: (class_of_activity) #2: (class_of_activity => standard_class_of_activity) #3: (class_of_activity => externally_defined_class_of_activity)

Table 7 (– Mapping table activity UoF (uof01)) continued

Application element	AIM element	Source	Rules	Reference path
CLASSIFICATION_OF_ INVOLVEMENT	plant_functional_class_of_ involvement_assignment	221		plant_functional_class_of_involvement_assignment <= group_assignment
classification_of_ involvement_in_ activity to class_of_ involvement (as classifier) #1: if class_of_ involvement is user defined #2: if class_of_ involvement is defined in this part of ISO 10303 #3: if class_of_ involvement is externally defined	PATH			plant_functional_class_of_involvement_assignment <= group_assignment group_assignment.assigned_group -> group => #1: (class_of_involvement) #2: (class_of_involvement => standard_class_of_involvement) #3: (class_of_involvement => externally_defined_class_of_involvement)
classification_of_ involvement_in_ activity to involvement_of_object_in_ activity (as classified)	PATH			plant_functional_class_of_involvement_assignment plant_functional_class_of_involvement_assignment.item[i] -> class_of_involvement_item (class_of_involvement_item = \ plant_functional_activity_performer_assignment plant_functional_activity_performer_assignment) (class_of_involvement_item = \ plant_functional_assessed_object_activity_assignment plant_functional_assessed_object_activity_assignment) (class_of_involvement_item = \ plant_functional_assessment_purpose_activity_assignment plant_functional_assessment_purpose_activity_assignment) (class_of_involvement_item = \ plant_functional_assessment_result_activity_assignment plant_functional_assessment_result_activity_assignment) (class_of_involvement_item = \ plant_functional_design_reference_activity_assignment plant_functional_design_reference_activity_assignment) (class_of_involvement_item = \

Table 7 (– Mapping table activity UoF (uof01)) continued

Application element	AIM element	Source	Rules	Reference path
				plant_functional_design_result_activity_assignment plant_functional_design_result_activity_assignment) (class_of_involvement_item = \ plant_functional_transfer_material_destination_activity_assignment plant_functional_transfer_material_destination_activity_assignment) (class_of_involvement_item = \ plant_functional_transfer_material_source_activity_assignment plant_functional_transfer_material_source_activity_assignment) (class_of_involvement_item = \ plant_functional_transferred_material_activity_assignment plant_functional_transferred_material_activity_assignment) (class_of_involvement_item = \ plant_functional_transform_material_input_activity_assignment plant_functional_transform_material_input_activity_assignment) (class_of_involvement_item = \ plant_functional_transform_material_output_activity_assignment plant_functional_transform_material_output_activity_assignment)
COMPOSITION_OF_ ACTIVITY #1: if composition_of_ activity referes to two specific_activity objects #2: if composition_of_ activity referes to two typical_activity objects	#1: (action_relationship) #2: (action_method_ relationship)	41 41		{#1: (action_relationship action_relationship.name = 'composition') #2: (action_method_relationship action_method_relationship.name = 'composition')}
composition_of_ activity to activity (as whole)	PATH			#1: (action_relationship action_relationship.relating_action -> action) #2: (action_method_relationship action_method_relationship.relating_method -> action_method)

Table 7 (– Mapping table activity UoF (uof01)) continued

Application element	AIM element	Source	Rules	Reference path
composition_of_ activity to activity (as part)	PATH			#1: (action_relationship action_relationship.related_action ->) action) #2: (action_method_relationship action_method_relationship.related_method ->) action_method)
INVOLVEMENT_OF_ OBJECT_IN_ACTIVITY #1: if the Involvement is 'Performer'	plant_functional_activity_ performer_assignment	221		plant_functional_activity_performer_assignment <= action_assignment
#1: involvement_of_ object_in_activity to activity (as involver)	PATH			plant_functional_activity_performer_assignment <= action_assignment action_assignment.assigned_action ->) (action) (action action.chosen_method ->) action_method)
#1: involvement_of_ object_in_activity to involved_object (as involved)	PATH			plant_functional_activity_performer_assignment plant_functional_activity_performer_assignment.items[i] ->) activity_performer_item (activity_performer_item = organization) organization) (activity_performer_item = person) person) (activity_performer_item = product_definition) product_definition)
#2: if the Activity is 'Assess', and the Involvement is 'Assessed_object'	plant_functional_assessed_ object_activity_assignment	221		plant_functional_assessed_object_activity_assignment <= action_assignment
#2: involvement_of_ object_in_activity to activity (as involver)	PATH			plant_functional_assessed_object_activity_assignment <= action_assignment action_assignment.assigned_action ->) (action) (action

Table 7 (– Mapping table activity UoF (uof01)) continued

Application element	AIM element	Source	Rules	Reference path
				action.chosen_method ->
action_method)
#2: involvement_of_
object_in_activity
to involved_object
(as involved)	PATH			plant_functional_assessed_object_activity_assignment
plant_functional_assessed_object_activity_assignment.items[i] ->
approval_item
(approval_item = action
action)
(approval_item = action_assignment
action_assignment)
(approval_item = action_method
action_method)
(approval_item = action_property
action_property)
(approval_item = action_relationship
action_relationship)
(approval_item = annotation_fill_area
annotation_fill_area)
(approval_item = annotation_occurrence
annotation_occurrence)
(approval_item = annotation_occurrence_relationship
annotation_occurrence_relationship)
(approval_item = annotation_symbol
annotation_symbol)
(approval_item = annotation_text
annotation_text)
(approval_item = approval_status
approval_status)
(approval_item = assembly_component_usage_substitute
assembly_component_usage_substitute)
(approval_item = axis2_placement_2d
axis2_placement_2d)
(approval_item = class_of_facility
class_of_facility)
(approval_item = class_of_facility_assembly_constraint
class_of_facility_assembly_constraint)
(approval_item = class_of_facility_connection_constraint

Table 7 (– Mapping table activity UoF (uof01)) continued

Application element	AIM element	Source	Rules	Reference path
				class_of_facility_connection_constraint) (approval_item = class_of_material class_of_material) (approval_item = class_of_material_assembly_constraint class_of_material_assembly_constraint) (approval_item = class_of_material_connection_constraint class_of_material_connection_constraint) (approval_item = classification_of_class_of_facility classification_of_class_of_facility) (approval_item = classification_of_class_of_material classification_of_class_of_material) (approval_item = classification_of_facility classification_of_facility) (approval_item = classification_of_material classification_of_material) (approval_item = colour_rgb colour_rgb) (approval_item = composite_text composite_text) (approval_item = connection_of_facility connection_of_facility) (approval_item = connection_of_material connection_of_material) (approval_item = curve curve) (approval_item = date_and_time date_and_time) (approval_item = defined_symbol defined_symbol) (approval_item = descriptive_representation_item descriptive_representation_item) (approval_item = direction_range_for_connector_feature direction_range_for_connector_feature) (approval_item = document document) (approval_item = document_reference

Table 7 (– Mapping table activity UoF (uof01)) continued

Application element	AIM element	Source	Rules	Reference path
				document_reference) (approval_item = document_relationship document_relationship) (approval_item = drawing_revision drawing_revision) (approval_item = drawing_sheet_revision drawing_sheet_revision) (approval_item = drawing_sheet_revision_usage drawing_sheet_revision_usage) (approval_item = effectivity effectivity) (approval_item = effectivity_assignment effectivity_assignment) (approval_item = fill_area_style_hatching fill_area_style_hatching) (approval_item = fill_area_style_tiles fill_area_style_tiles) (approval_item = group group) (approval_item = group_assignment group_assignment) (approval_item = group_relationship group_relationship) (approval_item = inheritance_effectivity inheritance_effectivity) (approval_item = library_assignment library_assignment) (approval_item = library_context library_context) (approval_item = measure_representation_item measure_representation_item) (approval_item = organization organization) (approval_item = organization_relationship organization_relationship) (approval_item = person

Table 7 (– Mapping table activity UoF (uof01)) continued

Application element	AIM element	Source	Rules	Reference path
				person) (approval_item = person_and_organization person_and_organization) (approval_item = planar_extent planar_extent) (approval_item = point point) (approval_item = positive_ratio_measure positive_ratio_measure) (approval_item = presentation_layer_assignment presentation_layer_assignment) (approval_item = presentation_layer_usage presentation_layer_usage) (approval_item = presentation_representation_relationship presentation_representation_relationship) (approval_item = presented_item_representation presented_item_representation) (approval_item = process_product_association process_product_association) (approval_item = process_property_association process_property_association) (approval_item = product_definition product_definition) (approval_item = product_definition_process product_definition_process) (approval_item = product_definition_relationship product_definition_relationship) (approval_item = product_definition_shape product_definition_shape) (approval_item = product_property_process product_property_process) (approval_item = property_definition property_definition) (approval_item = property_definition_alternative property_definition_alternative) (approval_item = property_definition_derivation

Table 7 (– Mapping table activity UoF (uof01)) continued

Application element	AIM element	Source	Rules	Reference path
				property_definition_derivation) (approval_item = property_definition_representation property_definition_representation) (approval_item = property_definition_version property_definition_version) (approval_item = recognized_class_of_resource recognized_class_of_resource) (approval_item = recognized_class_of_service recognized_class_of_service) (approval_item = recognized_provision_of_service_according_to_class recognized_provision_of_service_according_to_class) (approval_item = reference_between_page_connector reference_between_page_connector) (approval_item = representation representation) (approval_item = representation_relationship representation_relationship) (approval_item = serial_action_method serial_action_method) (approval_item = shape_aspect shape_aspect) (approval_item = shape_aspect_relationship shape_aspect_relationship) (approval_item = symbol_target symbol_target) (approval_item = text_literal text_literal) (approval_item = text_style_with_box_characteristics text_style_with_box_characteristics) (approval_item = view_dependent_invisibility view_dependent_invisibility)

Table 7 (– Mapping table activity UoF (uof01)) continued

Application element	AIM element	Source	Rules	Reference path
#3: if the Activity is 'Assess', and the Involvement is 'Assessment_purpose'	plant_functional_ assessment_purpose_ activity_assignment	221		plant_functional_assessment_purpose_activity_assignment <= action_assignment
#3: involvement_of_ object_in_activity to activity (as involver)	PATH			plant_functional_assessment_purpose_activity_assignment <= action_assignment action_assignment.assigned_action -> (action) (action action.chosen_method -> action_method)
#3: involvement_of_ object_in_activity to involved_object (as involved)	PATH			plant_functional_assessment_purpose_activity_assignment plant_functional_assessment_purpose_activity_assignment.items[i] -> assessment_purpose_item (assessment_purpose_item = action action) (assessment_purpose_item = action_method action_method) (assessment_purpose_item = class_of_activity class_of_activity)
#4: if the Activity is 'Assess', and the Involvement is 'Assessment_result'	plant_functional_ assessment_result_activity_ assignment	221		plant_functional_assessment_result_activity_assignment <= action_assignment
#4: involvement_of_ object_in_activity to activity (as involver)	PATH			plant_functional_assessment_result_activity_assignment <= action_assignment action_assignment.assigned_action -> (action) (action action.chosen_method -> action_method)

Table 7 (– Mapping table activity UoF (uof01)) continued

Application element	AIM element	Source	Rules	Reference path
#4: involvement_of_ object_in_activity to involved_object (as involved)	PATH			plant_functional_assessment_result_activity_assignment plant_functional_assessment_result_activity_assignment.items[i] -> assessment_result_item assessment_result_item = effectivity effectivity
#5: if the Activity is 'Design', and the Involvement is 'Referenced_in_ design'	plant_functional_design_ reference_activity_ assignment	221		plant_functional_design_reference_activity_assignment <= action_assignment
#5: involvement_of_ object_in_activity to activity (as involver)	PATH			plant_functional_design_reference_activity_assignment <= action_assignment action_assignment.assigned_action -> (action) (action action.chosen_method -> action_method)
#5: involvement_of_ object_in_activity to involved_object (as involved)	PATH			plant_functional_design_reference_activity_assignment plant_functional_design_reference_activity_assignment.items[i] -> design_item (design_item = action action) (design_item = action_assignment action_assignment) (design_item = action_method action_method) (design_item = action_property action_property) (design_item = action_relationship action_relationship) (design_item = annotation_fill_area annotation_fill_area) (design_item = annotation_occurrence annotation_occurrence) (design_item = annotation_occurrence_relationship annotation_occurrence_relationship)

Table 7 (– Mapping table activity UoF (uof01)) continued

Application element	AIM element	Source	Rules	Reference path
				(design_item = annotation_symbol annotation_symbol) (design_item = annotation_text annotation_text) (design_item = approval_status approval_status) (design_item = assembly_component_usage_substitute assembly_component_usage_substitute) (design_item = axis2_placement_2d axis2_placement_2d) (design_item = class_of_facility class_of_facility) (design_item = class_of_facility_assembly_constraint class_of_facility_assembly_constraint) (design_item = class_of_facility_connection_constraint class_of_facility_connection_constraint) (design_item = class_of_material class_of_material) (design_item = class_of_material_assembly_constraint class_of_material_assembly_constraint) (design_item = class_of_material_connection_constraint class_of_material_connection_constraint) (design_item = classification_of_class_of_facility classification_of_class_of_facility) (design_item = classification_of_class_of_material classification_of_class_of_material) (design_item = classification_of_facility classification_of_facility) (design_item = classification_of_material classification_of_material) (design_item = colour_rgb colour_rgb) (design_item = composite_text composite_text) (design_item = connection_of_facility connection_of_facility)

Table 7 (– Mapping table activity UoF (uof01)) continued

Application element	AIM element	Source	Rules	Reference path
				(design_item = connection_of_material connection_of_material) (design_item = curve curve) (design_item = date_and_time date_and_time) (design_item = defined_symbol defined_symbol) (design_item = descriptive_representation_item descriptive_representation_item) (design_item = direction_range_for_connector_feature direction_range_for_connector_feature) (design_item = document document) (design_item = document_reference document_reference) (design_item = document_relationship document_relationship) (design_item = drawing_revision drawing_revision) (design_item = drawing_sheet_revision drawing_sheet_revision) (design_item = drawing_sheet_revision_usage drawing_sheet_revision_usage) (design_item = effectivity effectivity) (design_item = effectivity_assignment effectivity_assignment) (design_item = fill_area_style_hatching fill_area_style_hatching) (design_item = fill_area_style_tiles fill_area_style_tiles) (design_item = group group) (design_item = group_assignment group_assignment)

Table 7 (– Mapping table activity UoF (uof01)) continued

Application element	AIM element	Source	Rules	Reference path
				(design_item = group_relationship group_relationship) (design_item = inheritance_effectivity inheritance_effectivity) (design_item = library_assignment library_assignment) (design_item = library_context library_context) (design_item = measure_representation_item measure_representation_item) (design_item = organization organization) (design_item = organization_relationship organization_relationship) (design_item = person person) (design_item = person_and_organization person_and_organization) (design_item = planar_extent planar_extent) (design_item = point point) (design_item = positive_ratio_measure positive_ratio_measure) (design_item = presentation_layer_assignment presentation_layer_assignment) (design_item = presentation_layer_usage presentation_layer_usage) (design_item = presentation_representation_relationship presentation_representation_relationship) (design_item = presented_item_representation presented_item_representation) (design_item = process_product_association process_product_association) (design_item = process_property_association process_property_association)

Table 7 (– Mapping table activity UoF (uof01)) continued

Application element	AIM element	Source	Rules	Reference path
				(design_item = product_definition product_definition) (design_item = product_definition_process product_definition_process) (design_item = product_definition_relationship product_definition_relationship) (design_item = product_definition_shape product_definition_shape) (design_item = product_property_process product_property_process) (design_item = property_definition property_definition) (design_item = property_definition_alternative property_definition_alternative) (design_item = property_definition_derivation property_definition_derivation) (design_item = property_definition_representation property_definition_representation) (design_item = property_definition_version property_definition_version) (design_item = recognized_class_of_resource recognized_class_of_resource) (design_item = recognized_class_of_service recognized_class_of_service) (design_item = recognized_provision_of_service_according_to_class recognized_provision_of_service_according_to_class) (design_item = reference_between_page_connector reference_between_page_connector) (design_item = representation representation) (design_item = representation_relationship representation_relationship) (design_item = serial_action_method serial_action_method) (design_item = shape_aspect shape_aspect)

Table 7 (– Mapping table activity UoF (uof01)) continued

Application element	AIM element	Source	Rules	Reference path
				(design_item = shape_aspect_relationship shape_aspect_relationship) (design_item = symbol_target symbol_target) (design_item = text_literal text_literal) (design_item = text_style_with_box_characteristics text_style_with_box_characteristics) (design_item = view_dependent_invisibility view_dependent_invisibility)
#6: if the Activity is 'Design', and the Involvement is 'Result_of_design'	plant_functional_design_result_activity_assignment	221		plant_functional_design_result_activity_assignment <= action_assignment
#6: involvement_of_object_in_activity to activity (as involver)	PATH			plant_functional_design_result_activity_assignment <= action_assignment action_assignment.assigned_action -> (action) (action action.chosen_method -> action_method)
#6: involvement_of_object_in_activity to involved_object (as involved)	PATH			plant_functional_design_result_activity_assignment plant_functional_design_result_activity_assignment.items[i] -> design_item (design_item = action action) (design_item = action_assignment action_assignment) (design_item = action_method action_method) (design_item = action_property action_property) (design_item = action_relationship action_relationship) (design_item = annotation_fill_area annotation_fill_area)

Table 7 (– Mapping table activity UoF (uof01)) continued

Application element	AIM element	Source	Rules	Reference path
				(design_item = annotation_occurrence annotation_occurrence) (design_item = annotation_occurrence_relationship annotation_occurrence_relationship) (design_item = annotation_symbol annotation_symbol) (design_item = annotation_text annotation_text) (design_item = approval_status approval_status) (design_item = assembly_component_usage_substitute assembly_component_usage_substitute) (design_item = axis2_placement_2d axis2_placement_2d) (design_item = class_of_facility class_of_facility) (design_item = class_of_facility_assembly_constraint class_of_facility_assembly_constraint) (design_item = class_of_facility_connection_constraint class_of_facility_connection_constraint) (design_item = class_of_material class_of_material) (design_item = class_of_material_assembly_constraint class_of_material_assembly_constraint) (design_item = class_of_material_connection_constraint class_of_material_connection_constraint) (design_item = classification_of_class_of_facility classification_of_class_of_facility) (design_item = classification_of_class_of_material classification_of_class_of_material) (design_item = classification_of_facility classification_of_facility) (design_item = classification_of_material classification_of_material) (design_item = colour_rgb colour_rgb)

Table 7 (– Mapping table activity UoF (uof01)) continued

Application element	AIM element	Source	Rules	Reference path
				(design_item = composite_text composite_text) (design_item = connection_of_facility connection_of_facility) (design_item = connection_of_material connection_of_material) (design_item = curve curve) (design_item = date_and_time date_and_time) (design_item = defined_symbol defined_symbol) (design_item = descriptive_representation_item descriptive_representation_item) (design_item = direction_range_for_connector_feature direction_range_for_connector_feature) (design_item = document document) (design_item = document_reference document_reference) (design_item = document_relationship document_relationship) (design_item = drawing_revision drawing_revision) (design_item = drawing_sheet_revision drawing_sheet_revision) (design_item = drawing_sheet_revision_usage drawing_sheet_revision_usage) (design_item = effectivity effectivity) (design_item = effectivity_assignment effectivity_assignment) (design_item = fill_area_style_hatching fill_area_style_hatching) (design_item = fill_area_style_tiles fill_area_style_tiles)

Table 7 (– Mapping table activity UoF (uof01)) continued

Application element	AIM element	Source	Rules	Reference path
				(design_item = group group) (design_item = group_assignment group_assignment) (design_item = group_relationship group_relationship) (design_item = inheritance_effectivity inheritance_effectivity) (design_item = library_assignment library_assignment) (design_item = library_context library_context) (design_item = measure_representation_item measure_representation_item) (design_item = organization organization) (design_item = organization_relationship organization_relationship) (design_item = person person) (design_item = person_and_organization person_and_organization) (design_item = planar_extent planar_extent) (design_item = point point) (design_item = positive_ratio_measure positive_ratio_measure) (design_item = presentation_layer_assignment presentation_layer_assignment) (design_item = presentation_layer_usage presentation_layer_usage) (design_item = presentation_representation_relationship presentation_representation_relationship) (design_item = presented_item_representation presented_item_representation)

Table 7 (– Mapping table activity UoF (uof01)) continued

Application element	AIM element	Source	Rules	Reference path
				(design_item = process_product_association process_product_association) (design_item = process_property_association process_property_association) (design_item = product_definition product_definition) (design_item = product_definition_process product_definition_process) (design_item = product_definition_relationship product_definition_relationship) (design_item = product_definition_shape product_definition_shape) (design_item = product_property_process product_property_process) (design_item = property_definition property_definition) (design_item = property_definition_alternative property_definition_alternative) (design_item = property_definition_derivation property_definition_derivation) (design_item = property_definition_representation property_definition_representation) (design_item = property_definition_version property_definition_version) (design_item = recognized_class_of_resource recognized_class_of_resource) (design_item = recognized_class_of_service recognized_class_of_service) (design_item = recognized_provision_of_service_according_to_class recognized_provision_of_service_according_to_class) (design_item = reference_between_page_connector reference_between_page_connector) (design_item = representation representation) (design_item = representation_relationship representation_relationship)

Table 7 (– Mapping table activity UoF (uof01)) continued

Application element	AIM element	Source	Rules	Reference path
				(design_item = serial_action_method serial_action_method) (design_item = shape_aspect shape_aspect) (design_item = shape_aspect_relationship shape_aspect_relationship) (design_item = symbol_target symbol_target) (design_item = text_literal text_literal) (design_item = text_style_with_box_characteristics text_style_with_box_characteristics) (design_item = view_dependent_invisibility view_dependent_invisibility)
#7: if the Activity is 'Transfer_ material', and the Involvement is 'Material_ destination'	plant_functional_transfer_ material_destination_ activity_assignment	221		plant_functional_transfer_material_destination_activity_assignment <= action_assignment
#7: involvement_of_ object_in_activity to activity (as involver)	PATH			plant_functional_transfer_material_destination_\ activity_assignment <= action_assignment action_assignment.assigned_action -> (action) (action action.chosen_method -> action_method)
#7: involvement_of_ object_in_activity to involved_object (as involved)	PATH			plant_functional_transfer_material_destination_\ activity_assignment plant_functional_transfer_material_destination_\ activity_assignment.items[i] -> transfer_source_destination_item transfer_source_destination_item = product_definition product_definition

Table 7 (– Mapping table activity UoF (uof01)) continued

Application element	AIM element	Source	Rules	Reference path
#8: if the Activity is 'Transfer_material', and the Involvement is 'Material_source'	plant_functional_transfer_material_source_activity_assignment	221		plant_functional_transfer_material_source_activity_assignment <= action_assignment
#8: involvement_of_object_in_activity to activity (as involver)	PATH			plant_functional_transfer_material_source_\ activity_assignment <= action_assignment action_assignment.assigned_action -> (action) (action action.chosen_method -> action_method)
#8: involvement_of_object_in_activity to involved_object (as involved)	PATH			plant_functional_transfer_material_source_activity_assignment plant_functional_transfer_material_source_activity_assignment.items[i] -> transfer_source_destination_item transfer_source_destination_item = product_definition product_definition
#9: if the Activity is 'Transfer_material', and the Involvement is 'Transferred_material'	plant_functional_transferred_material_activity_assignment	221		plant_functional_transferred_material_activity_assignment <= action_assignment
#9: involvement_of_object_in_activity to activity (as involver)	PATH			plant_functional_transferred_material_\ activity_assignment <= action_assignment action_assignment.assigned_action -> (action) (action action.chosen_method -> action_method)

Table 7 (– Mapping table activity UoF (uof01)) continued

Application element	AIM element	Source	Rules	Reference path
#9: involvement_of_ object_in_activity to involved_object (as involved)	PATH			plant_functional_transferred_material_activity_assignment plant_functional_transferred_material_activity_assignment.items[i] -> transfer_material_item transfer_material_item = product_definition product_definition
#10: if the Activity is 'Transform_ material', and the Involvement is 'Input_material'	plant_functional_transform_ material_input_activity_ assignment	221		plant_functional_transform_material_input_activity_assignment <= action_assignment
#10: involvement_of_ object_in_activity to activity (as involver)	PATH			plant_functional_transform_material_input_\ activity_assignment <= action_assignment action_assignment.assigned_action -> (action) (action action.chosen_method -> action_method)
#10: involvement_of_ object_in_activity to involved_object (as involved)	PATH			plant_functional_transform_material_input_activity_assignment plant_functional_transform_material_input_activity_assignment.\ items[i] -> transform_material_item transform_material_item = product_definition product_definition
#11: if the Activity is 'Transform_ material', and the Involvement is 'Output_material'	plant_functional_transform_ material_output_activity_ assignment	221		plant_functional_transform_material_output_activity_assignment <= action_assignment
#11: involvement_of_ object_in_activity to activity (as involver)	PATH			plant_functional_transform_material_output_activity_assignment <= action_assignment action_assignment.assigned_action -> (action) (action

Table 7 (– Mapping table activity UoF (uof01)) concluded

Application element	AIM element	Source	Rules	Reference path
				action.chosen_method -> action_method)
#11: involvement_of_ object_in_activity to involved_object (as involved)	PATH			plant_functional_transform_material_output_activity_assignment plant_functional_transform_material_output_activity_assignment.\ items[i] -> transform_material_item transform_material_item = product_definition product_definition
TEMPORAL_SEQUENCE_OF_ ACTIVITY #1: if temporal_sequence_ of_activity refers to two specific_activity objects	action_sequence	221		action_sequence <= [action] [action_relationship]
#1: temporal_ sequence_of_activity to specific_activity (as predecessor)	PATH			action_sequence <= action_relationship action_relationship.relating_action -> action
#1: temporal_ sequence_of_activity to specific_activity (as successor)	PATH			action_sequence <= action_relationship action_relationship.related_action -> action
#2: if temporal_ sequence_of_activity refers to two typical_activity objects	action_method_sequence	221		action_method_sequence <= [action_method] [action_method_relationship]
#2: temporal_ sequence_of_activity to typical_activity (as predecessor)	PATH			action_method_sequence <= action_method_relationship action_method_relationship.relating_method -> action_method
#2: temporal_ sequence_of_activity to typical_activity (as successor)	PATH			action_method_sequence <= action_method_relationship action_method_relationship.related_method -> action_method

Table 8 – Mapping table administration UoF (uof02)

Application element	AIM element	Source	Rules	Reference path
COMPOSITION_OF_ ORGANIZATION	organization_relationship	41		{organization_relationship.name = 'composition'}
composition_of_ organization to organization (as part)	PATH			organization_relationship organization_relationship.related_organization -> organization
composition_of_ organization to organization (as whole)	PATH			organization_relationship organization_relationship.relating_organization -> organization
CONTROL_OF_ INFORMATION_CONTENT_ BY_ORGANIZATION	plant_functional_ organization_assignment	221		{plant_functional_organization_assignment <= organization_assignment organization_assignment.role -> organization_role organization_role.name = 'controller'}
control_of_ information_content_ by_organization to information_content (as controlled)	PATH			plant_functional_organization_assignment plant_functional_organization_assignment.items[i] -> information_content_item information_content_item = representation_context
control_of_ information_content_ by_organization to organization (as controller)	PATH			plant_functional_organization_assignment <= organization_assignment organization_assignment.assigned_organization -> organization
CUSTODY_OF_MATERIAL_ BY_ORGANIZATION	plant_functional_ organization_assignment	221		{plant_functional_organization_assignment <= organization_assignment organization_assignment.role -> organization_role organization_role.name = 'custodian'}
custody_of_material_ by_organization to material (as held)	PATH			plant_functional_organization_assignment plant_functional_organization_assignment.items[i] -> organization_item organization_item = product_definition product_definition

Table 8 (– Mapping table administration UoF (uof02)) continued

Application element	AIM element	Source	Rules	Reference path
custody_of_material_ by_organization to organization (as custodian)	PATH			plant_functional_organization_assignment <= organization_assignment organization_assignment.assigned_organization -> organization
HOLDING_OF_ ORGANIZATIONAL_ POSITION_BY_PERSON	person_and_organization	41		
holding_of_ organizational_ position_by_person to organization (as held)	PATH			person_and_organization person_and_organization.the_organization -> organization
holding_of_ organizational_ position_by_person to person (as holder)	PATH			person_and_organization person_and_organization.the_person -> person
OPERATION_OF_ FACILITY_BY_ ORGANIZATION	plant_functional_ organization_assignment	221		{plant_functional_organization_assignment <= organization_assignment organization_assignment.role -> organization_role organization_role.name = 'operator'}

Table 8 (– Mapping table administration UoF (uof02)) continued

Application element	AIM element	Source	Rules	Reference path
operation_of_ facility_by_ organization to facility (as operated) #1: if facility is a specific facility #2: if facility is a typical facility #3: if facility is a catalogue of typical facility objects	PATH			plant_functional_organization_assignment plant_functional_organization_assignment.items[i] -> organization_item #1: (organization_item = product_definition product_definition) #2: (organization_item = product_definition product_definition) #3: (organization_item = library_context library_context)
operation_of_ facility_by_ organization to organization (as operator)	PATH			plant_functional_organization_assignment <= organization_assignment organization_assignment.assigned_organization -> organization
ORGANIZATION	organization	41		
OWNERSHIP_OF_ INTELLECTUAL_ PROPERTY_BY_ ORGANIZATION	plant_functional_ organization_assignment	221		{plant_functional_organization_assignment <= organization_assignment organization_assignment.role -> organization_role organization_role.name = 'owner'}
ownership_of_ intellectual_ property_by_ organization to information_content (as owned)	PATH			plant_functional_organization_assignment plant_functional_organization_assignment.items[i] -> organization_item organization_item = representation_context representation_context

Table 8 (– Mapping table administration UoF (uof02)) concluded

Application element	AIM element	Source	Rules	Reference path
ownership_of_ intellectual_ property_by_ organization to organization (as owner)	PATH			plant_functional_organization_assignment <= organization_assignment organization_assignment.assigned_organization -> organization
OWNERSHIP_OF_ MATERIAL_BY_ ORGANIZATION	plant_functional_ organization_assignment	221		{plant_functional_organization_assignment <= organization_assignment organization_assignment.role -> organization_role organization_role.name = 'owner'}
ownership_of_ material_by_ organization to material (as owned)	PATH			plant_functional_organization_assignment plant_functional_organization_assignment.items[i] -> organization_item organization_item = product_definition product_definition
ownership_of_ material_by_ organization to organization (as owner)	PATH			plant_functional_organization_assignment <= organization_assignment organization_assignment.assigned_organization -> organization
PERSON	person	41		

Table 9 – Mapping table approval UoF (uof03)

Application element	AIM element	Source	Rules	Reference path
APPROVAL_OF_OBJECT	plant_functional_approval_assignment	221		plant_functional_approval_assignment <= approval_assignment
status	approval_status.name	41	3	plant_functional_approval_assignment <= approval_assignment approval_assignment.assigned_approval -> approval approval.status -> approval_status approval_status.name
approval_of_object to assessed_object (as assessed)	PATH			plant_functional_approval_assignment plant_functional_approval_assignment.items[i] -> approval_item (approval_item = action action) (approval_item = action_assignment action_assignment) (approval_item = action_method action_method) (approval_item = action_property action_property) (approval_item = action_relationship action_relationship) (approval_item = annotation_fill_area annotation_fill_area) (approval_item = annotation_occurrence annotation_occurrence) (approval_item = annotation_occurrence_relationship annotation_occurrence_relationship) (approval_item = annotation_symbol annotation_symbol) (approval_item = annotation_text annotation_text) (approval_item = approval_status approval_status) (approval_item = assembly_component_usage_substitute assembly_component_usage_substitute)

Table 9 (– Mapping table approval UoF (uof03)) continued

Application element	AIM element	Source	Rules	Reference path
				(approval_item = axis2_placement_2d axis2_placement_2d) (approval_item = class_of_facility class_of_facility) (approval_item = class_of_facility_assembly_constraint class_of_facility_assembly_constraint) (approval_item = class_of_facility_connection_constraint class_of_facility_connection_constraint) (approval_item = class_of_material class_of_material) (approval_item = class_of_material_assembly_constraint class_of_material_assembly_constraint) (approval_item = class_of_material_connection_constraint class_of_material_connection_constraint) (approval_item = classification_of_class_of_facility classification_of_class_of_facility) (approval_item = classification_of_class_of_material classification_of_class_of_material) (approval_item = classification_of_facility classification_of_facility) (approval_item = classification_of_material classification_of_material) (approval_item = colour_rgb colour_rgb) (approval_item = composite_text composite_text) (approval_item = connection_of_facility connection_of_facility) (approval_item = connection_of_material connection_of_material) (approval_item = curve curve) (approval_item = date_and_time date_and_time) (approval_item = defined_symbol defined_symbol)

Table 9 (– Mapping table approval UoF (uof03)) continued

Application element	AIM element	Source	Rules	Reference path
				(approval_item = descriptive_representation_item descriptive_representation_item) (approval_item = direction_range_for_connector_feature direction_range_for_connector_feature) (approval_item = document document) (approval_item = document_reference document_reference) (approval_item = document_relationship document_relationship) (approval_item = drawing_revision drawing_revision) (approval_item = drawing_sheet_revision drawing_sheet_revision) (approval_item = drawing_sheet_revision_usage drawing_sheet_revision_usage) (approval_item = effectivity effectivity) (approval_item = effectivity_assignment effectivity_assignment) (approval_item = fill_area_style_hatching fill_area_style_hatching) (approval_item = fill_area_style_tiles fill_area_style_tiles) (approval_item = group group) (approval_item = group_assignment group_assignment) (approval_item = group_relationship group_relationship) (approval_item = inheritance_effectivity inheritance_effectivity) (approval_item = library_assignment library_assignment) (approval_item = library_context library_context)

Table 9 (– Mapping table approval UoF (uof03)) continued

Application element	AIM element	Source	Rules	Reference path
				(approval_item = measure_representation_item measure_representation_item) (approval_item = organization organization) (approval_item = organization_relationship organization_relationship) (approval_item = person person) (approval_item = person_and_organization person_and_organization) (approval_item = planar_extent planar_extent) (approval_item = point point) (approval_item = positive_ratio_measure positive_ratio_measure) (approval_item = presentation_layer_assignment presentation_layer_assignment) (approval_item = presentation_layer_usage presentation_layer_usage) (approval_item = presentation_representation_relationship presentation_representation_relationship) (approval_item = presented_item_representation presented_item_representation) (approval_item = process_product_association process_product_association) (approval_item = process_property_association process_property_association) (approval_item = product_definition product_definition) (approval_item = product_definition_process product_definition_process) (approval_item = product_definition_relationship product_definition_relationship) (approval_item = product_definition_shape product_definition_shape)

Table 9 (– Mapping table approval UoF (uof03)) continued

Application element	AIM element	Source	Rules	Reference path
				(approval_item = product_property_process product_property_process) (approval_item = property_definition property_definition) (approval_item = property_definition_alternative property_definition_alternative) (approval_item = property_definition_derivation property_definition_derivation) (approval_item = property_definition_representation property_definition_representation) (approval_item = property_definition_version property_definition_version) (approval_item = recognized_class_of_resource recognized_class_of_resource) (approval_item = recognized_class_of_service recognized_class_of_service) (approval_item = recognized_provision_of_service_according_to_class recognized_provision_of_service_according_to_class) (approval_item = reference_between_page_connector reference_between_page_connector) (approval_item = representation representation) (approval_item = representation_relationship representation_relationship) (approval_item = serial_action_method serial_action_method) (approval_item = shape_aspect shape_aspect) (approval_item = shape_aspect_relationship shape_aspect_relationship) (approval_item = symbol_target symbol_target) (approval_item = text_literal text_literal) (approval_item = text_style_with_box_characteristics text_style_with_box_characteristics)

Table 9 (– Mapping table approval UoF (uof03)) concluded

Application element	AIM element	Source	Rules	Reference path
				(approval_item = view_dependent_invisibility view_dependent_invisibility)
approval_of_object to activity (as purpose) #1: if activity is a specific activity #2: if activity is a typical activity	PATH			plant_functional_approval_assignment <= approval_assignment approval_assignment.assigned_approval -> approval #1: ({approval.level = action.name} action) #2: ({approval.level = action_method.name} action_method)
approval_of_object to class_of_activity (as purpose)	PATH			plant_functional_approval_assignment <= approval_assignment approval_assignment.assigned_approval -> approval {approval.level = group.name {group => class_of_activity}}
COMPOSITION_OF_DATA_ RECORD	plant_functional_ composition_of_data_record_ group_assignment	221		plant_functional_composition_of_data_record_group_assignment <= group_assignment
composition_of_data_ record to data_ record (as part)	PATH			plant_functional_composition_of_data_record_group_assignment plant_functional_composition_of_data_record_group_assignment.item[i] -> data_record_item data_record_item = data_record
composition_of_data_ record to data_ record (as whole)	PATH			plant_functional_composition_of_data_record_group_assignment <= group_assignment group_assignment.assigned_group

Table 10 – Mapping table catalogue UoF (uof04)

Application element	AIM element	Source	Rules	Reference path
SPECIFIC_OBJECT	IDENTICAL MAPPING			
TYPICAL_OBJECT	IDENTICAL MAPPING			
TYPICAL_OR_SPECIFIC_ OBJECT	IDENTICAL MAPPING			

Table 11 – Mapping table classification of plant item UoF (uof05)

Application element	AIM element	Source	Rules	Reference path
CLASS_OF_FACILITY #1: if class_of_facility is user defined #2: if class_of_facility is defined in this part of ISO 10303 #3: if class_of_facility is externally defined	#1: (class_of_facility) #2: (standard_class_of_ facility) #3: (externally_defined_ class_of_facility)	221 221 221		#1: (class_of_facility <= [product_category] [characterized_object]) #2: (standard_class_of_facility <= [class_of_facility <= [product_category] [characterized_object]] [pre_defined_item]) #3: (externally_defined_class_of_facility <= [class_of_facility <= [product_category] [characterized_object]] [externally_defined_item])
CLASS_OF_MATERIAL #1: if class_of_material is user defined #2: if class_of_material is defined in this part of ISO 10303 #3: if class_of_material is externally defined	#1: (class_of_material) #2: (standard_class_of_ material) #3: (externally_defined_ class_of_material)	221 221 221		#1: (class_of_material <= [product_category] [characterized_object]) #2: (standard_class_of_material <= [class_of_material <= [product_category] [characterized_object]] [pre_defined_item]) #3: (externally_defined_class_of_material <= [class_of_material <= [product_category] [characterized_object]] [externally_defined_item])
CLASSIFICATION_OF_ FACILITY	classification_of_facility	221		classification_of_facility <= product_related_product_category <= product_category {product_category.name = 'classifier'}

Table 11 (– Mapping table classification of plant item UoF (uof05)) continued

Application element	AIM element	Source	Rules	Reference path
classification_of_ facility to class_of_ facility (as classifier)	PATH			classification_of_facility <= product_related_product_category <= product_category <- product_category_relationship.category product_category_relationship {product_category_relationship.name='class assignment'} product_category_relationship.sub_category -> product_category => (class_of_facility) (standard_class_of_facility) (externally_defined_class_of_facility)
classification_of_ facility to facility (as classified) #1: if facility is a specific facility #2: if facility is a typical facility #3: not relevant	PATH			classification_of_facility <= product_related_product_category product_related_product_category.products[i] -> product <- product_definition_formation.of_product product_definition_formation <- product_definition.formation #1: (product_definition) #2: (product_definition)
CLASSIFICATION_OF_ MATERIAL	classification_of_material	221		classification_of_material <= product_related_product_category <= product_category {product_category.name = 'classifier'}
classification_of_ material to class_of_ material (as classifier)	PATH			classification_of_material <= product_related_product_category <= product_category <- product_category_relationship.category product_category_relationship {product_category_relationship.name = 'class assignment'} product_category_relationship.sub_category -> product_category => (class_of_material) (standard_class_of_material) (externally_defined_class_of_material)

Table 11 (– Mapping table classification of plant item UoF (uof05)) continued

Application element	AIM element	Source	Rules	Reference path
classification_of_ material to material (as classified) #1: if material is a specific material #2: if material is a typical material #3: not relevant	PATH			classification_of_material <= product_related_product_category product_related_product_category.products[i] ->> product <- product_definition_formation.of_product product_definition_formation <- product_definition.formation #1: (product_definition) #2: (product_definition)
RECOGNIZED_CLASS_OF_ RESOURCE_FOR_ FACILITY	recognized_class_of_ resource	221		recognized_class_of_resource <= product_related_product_category <= product_category
recognized_class_of_ resource_for_ facility to class_of_ material (as resource)	PATH			recognized_class_of_resource <= product_related_product_category <= product_category=> (class_of_material) (standard_class_of_material) (externally_defined_class_of_material)
recognized_class_of_ resource_for_ facility to facility (as service) #1: if facility is a specific facility #2: if facility is a typical facility #3: not relevant	PATH			recognized_class_of_resource <= product_related_product_category product_related_product_category.products[i] ->> product <- product_definition_formation.of_product product_definition_formation <- product_definition.formation #1: (product_definition) #2: (product_definition)
RECOGNIZED_CLASS_OF_ SERVICE_FOR_MATERIAL	recognized_class_of_ service	221		recognized_class_of_service <= product_related_product_category <= product_category

Table 11 (– Mapping table classification of plant item UoF (uof05)) concluded

Application element	AIM element	Source	Rules	Reference path
recognized_class_of_ service_for_material to class_of_facility (as service)	PATH			recognized_class_of_service <= product_related_product_category <= product_category => (class_of_facility) (standard_class_of_facility) (externally_defined_class_of_facility)
recognized_class_of_ service_for_material to material (as resource) #1: if material is a specific material #2: if material is a typical material #3: not relevant	PATH			recognized_class_of_service <= product_related_product_category product_related_product_category.products[i] -> product <- product_definition_formation.of_product product_definition_formation <- product_definition.formation #1: (product_definition) #2: (product_definition)

Table 12 – Mapping table composition and connection of plant item UoF (uof06)

Application element	AIM element	Source	Rules	Reference path
ASSEMBLY_OF_FACILITY	assembly_of_facility	221	7	assembly_of_facility <= assembly_component_usage
ASSEMBLY_OF_MATERIAL	assembly_of_material	221	7	assembly_of_material <= assembly_component_usage
COLLECTION_OF_ FACILITY	collection_of_facility	221	7	collection_of_facility<= product_definition_usage
COLLECTION_OF_ MATERIAL	collection_of_material	221	7	collection_of_material <= product_definition_usage
COMPOSITION_OF_ FACILITY #1: if composition_of_ facility is an assembly #2: if composition_of_ facility is a collection #3: if composition_of_ facility is an assignment of a facility to a catalogue of typical facility objects	#1: (assembly_of_ facility) #2: (collection_of_ facility) #3: (plant_functional_ typical_facility_catalogue_ assignment)	221 221 221		#1: (assembly_of_facility <= assembly_component_usage) #2: (collection_of_facility <= product_definition_usage) #3: (plant_functional_typical_facility_catalogue_assignment <= library_assignment library_assignment.frame_of_reference -> library_context {library_context.library_reference = 'typical facility catalogue'})
composition_of_ facility to facility (as part)	PATH			#1: (assembly_of_facility <= assembly_component_usage <= product_definition_usage <= product_definition_relationship product_definition_relationship.related_product_definition -> product_definition) #2: (collection_of_facility <= product_definition_usage <= product_definition_relationship product_definition_relationship.related_product_definition -> product_definition) #3: (plant_functional_typical_facility_catalogue_assignment plant_functional_typical_facility_catalogue_assignment.items[i] ->

Table 12 (– Mapping table composition and connection of plant item UoF (uof06)) continued

Application element	AIM element	Source	Rules	Reference path
				typical_facility_catalogue_item typical_facility_catalogue_item = product_definition product_definition)
composition_of_ facility to facility (as whole)	PATH			#1: (assembly_of_facility <= assembly_component_usage <= product_definition_usage <= product_definition_relationship product_definition_relationship.relating_product_definition -> product_definition) #2: (collection_of_facility <= product_definition_usage <= product_definition_relationship product_definition_relationship.relating_product_definition -> product_definition) #3: (plant_functional_typical_facility_catalogue_assignment <= library_assignment library_assignment.frame_of_reference -> library_context <= application_context_element => product_definition_context <- product_definition.frame_of_reference product_definition)

Table 12 (– Mapping table composition and connection of plant item UoF (uof06)) continued

Application element	AIM element	Source	Rules	Reference path
COMPOSITION_OF_ MATERIAL #1: if composition_of_ material is an assembly #2: if composition_of_ material is a collection #3: if composition_of_ material is an assignment of a material to a catalogue of typical material objects	#1: (assembly_of_ material) #2: (collection_of_ material) #3: (plant_functional_ typical_material_catalogue_ assignment)	221 221 221		#1: (assembly_of_material <= assembly_component_usage) #2: (collection_of_material <= product_definition_usage) #3: (plant_functional_typical_material_catalogue_assignment <= library_assignment library_assignment.frame_of_reference -> library_context {library_context.library_reference = 'typical material catalogue'})
composition_of_ material to material (as part)	PATH			#1: (assembly_of_material <= assembly_component_usage <= product_definition_usage <= product_definition_relationship product_definition_relationship.related_product_definition -> product_definition) #2: (collection_of_material <= product_definition_usage <= product_definition_relationship product_definition_relationship.related_product_definition -> product_definition) #3: (plant_functional_typical_material_catalogue_assignment plant_functional_typical_material_catalogue_assignment.items[i] -> typical_material_catalogue_item typical_material_catalogue_item = product_definition product_definition)
composition_of_ material to material (as whole)	PATH			#1: (assembly_of_material <= assembly_component_usage <= product_definition_usage <= product_definition_relationship

Table 12 (– Mapping table composition and connection of plant item UoF (uof06)) continued

Application element	AIM element	Source	Rules	Reference path
				product_definition_relationship.relating_product_definition -> product_definition) #2: (collection_of_material <= product_definition_usage <= product_definition_relationship product_definition_relationship.relating_product_definition -> product_definition) #3: (plant_functional_typical_material_catalogue_assignment <= library_assignment library_assignment.frame_of_reference -> library_context <= application_context_element => product_definition_context <- product_definition.frame_of_reference product_definition)
CONNECTION_OF_ FACILITY	connection_of_facility	221	7	connection_of_facility <= [product_definition_relationship] [product_definition]
connection_of_ facility to facility (as side_1)	PATH			connection_of_facility <= product_definition_relationship product_definition_relationship.relating_product_definition -> product_definition
connection_of_ facility to facility (as side_2)	PATH			connection_of_facility <= product_definition_relationship product_definition_relationship.related_product_definition -> product_definition
CONNECTION_OF_ MATERIAL	connection_of_material	221	7	connection_of_material <= [product_definition_relationship] [product_definition]
connection_of_ material to material (as side_1)	PATH			connection_of_material<= product_definition_relationship product_definition_relationship.relating_product_definition -> product_definition

Table 12 (– Mapping table composition and connection of plant item UoF (uof06)) continued

Application element	AIM element	Source	Rules	Reference path
connection_of_ material to material (as side_2)	PATH			connection_of_material<= product_definition_relationship product_definition_relationship.related_product_definition -> product_definition
CONNECTOR_OF_ FACILITY	facility_port	221		facility_port <= product_definition
FEATURE	shape_aspect	41		
POSSESSION_OF_ CONNECTOR_BY_ FACILITY	possession_of_facility_ port	221		possession_of_facility_port <= product_definition_usage
possession_of_ connector_by_ facility to connector_of_ facility (as possessed)	PATH			possession_of_facility_port <= product_definition_usage <= product_definition_relationship product_definition_relationship.related_product_definition -> product_definition => facility_port
possession_of_ connector_by_ facility to facility (as possessor)	PATH			possession_of_facility_port <= product_definition_usage <= product_definition_relationship product_definition_relationship.relating_product_definition -> product_definition
POSSESSION_OF_ FEATURE_BY_MATERIAL	product_definition_shape	41		
possession_of_ feature_by_material to feature (as possessed)	PATH			product_definition_shape <- shape_aspect.of_shape shape_aspect
possession_of_ feature_by_material to material (as possessor)	PATH			product_definition_shape <= property_definition property_definition.definition -> characterized_definition characterized_definition = characterized_product_definition characterized_product_definition characterized_product_definition = product_definition product_definition

Table 12 (– Mapping table composition and connection of plant item UoF (uof06)) continued

Application element	AIM element	Source	Rules	Reference path
TOPOLOGIC_SEQUENCE_ OF_FACILITY	topological_sequence_of_ facility	221		topological_sequence_of_facility <= [product_definition] [product_definition_relationship]
topologic_sequence_ of_facility to facility (as context) #1: if facility is a specific_facility #2: if facility is a typical_facility #3: not relevant	PATH			#1: (topological_sequence_of_facility <= product_definition <- product_definition_relationship.related_product_definition product_definition_relationship {product_definition_relationship.name = 'context for sequence'} product_definition_relationship.relating_product_definition -> product_definition) #2: (topological_sequence_of_facility <= product_definition <- product_definition_relationship.related_product_definition product_definition_relationship {product_definition_relationship.name = 'context for sequence'} product_definition_relationship.relating_product_definition -> product_definition)
topologic_sequence_ of_facility to facility (as predecessor) #1: if facility is a specific_facility #2: if facility is a typical_facility #3: not relevant	PATH			#1: (topological_sequence_of_facility <= product_definition_relationship product_definition_relationship.related_product_definition -> product_definition) #2: (topological_sequence_of_facility <= product_definition_relationship product_definition_relationship.related_product_definition -> product_definition)

Table 12 (– Mapping table composition and connection of plant item UoF (uof06)) continued

Application element	AIM element	Source	Rules	Reference path
topologic_sequence_ of_facility to facility (as successor) #1: if facility is a specific_facility #2: if facility is a typical_facility #3: not relevant	PATH			#1: (topological_sequence_of_facility <= product_definition_relationship product_definition_relationship.relating_product_definition -> product_definition) #2: (topological_sequence_of_facility <= product_definition_relationship product_definition_relationship.relating_product_definition -> product_definition)
USAGE_OF_FACILITY_IN_ CONNECTION	usage_of_facility_in_ connection	221		usage_of_facility_in_connection <= product_definition_relationship
usage_of_facility_in_ connection to connection_of_ facility (as using)	PATH			usage_of_facility_in_connection <= product_definition_relationship product_definition_relationship.relating_product_definition -> product_definition => connection_of_facility
usage_of_facility_in_ connection to facility (as used) #1: if facility is a specific_facility #2: if facility is a typical_facility #3: not relevant	PATH			#1: (usage_of_facility_in_connection<= product_definition_relationship product_definition_relationship.related_product_definition -> product_definition) #2: (usage_of_facility_in_connection<= product_definition_relationship product_definition_relationship.related_product_definition -> product_definition)
USAGE_OF_FEATURE_IN_ CONNECTION_OF_ MATERIAL	usage_of_feature_in_ connection	221		usage_of_feature_in_connection <= [shape_aspect] [shape_aspect_relationship]

Table 12 (– Mapping table composition and connection of plant item UoF (uof06)) concluded

Application element	AIM element	Source	Rules	Reference path
usage_of_feature_in_ connection_of_ material to connection_of_ material (as using)	PATH			usage_of_feature_in_connection<= shape_aspect_relationship shape_aspect_relationship.relating_shape_aspect shape_aspect shape_aspect.of_shape -> product_definition_shape <= property_definition property_definition.definition -> characterized_definition characterized_definition = characterized_product_definition characterized_product_definition = product_definition_relationship product_definition_relationship => connection_of_material
usage_of_feature_in_ connection_of_ material to feature (as used)	PATH			usage_of_feature_in_connection<= shape_aspect_relationship shape_aspect_relationship.related_shape_aspect shape_aspect
USAGE_OF_MATERIAL_IN_ CONNECTION	usage_of_material_in_ connection	221	7	usage_of_material_in_connection <= product_definition_relationship
usage_of_material_in_ connection to connection_of_ material (as using)	PATH			usage_of_material_in_connection <= product_definition_relationship product_definition_relationship.relating_product_definition -> product_definition => connection_of_material
usage_of_material_in_ connection to material (as used)	PATH			usage_of_material_in_connection <= product_definition_relationship product_definition_relationship.related_product_definition -> product_definition

Table 13 – Mapping table data_inheritance UoF (uof07)

Application element	AIM element	Source	Rules	Reference path
EXCLUSION_OF_ ASSOCIATION_FROM_ INHERITANCE	plant_functional_ inheritance_exclusion_ assignment	221		plant_functional_inheritance_exclusion_assignment <= effectivity_assignment
exclusion_of_ association_from_ inheritance to inheritable_object (as excluded)	PATH			plant_functional_inheritance_exclusion_assignment plant_functional_inheritance_exclusion_assignment.items[i] -> inherited_item (inherited_item = action_assignment action_assignment) (inherited_item = action_method_relationship action_method_relationship) (inherited_item = action_relationship action_relationship) (inherited_item = approval_assignment approval_assignment) (inherited_item = document_reference document_reference) (inherited_item = effectivity_assignment effectivity_assignment) (inherited_item = group_assignment group_assignment) (inherited_item = library_assignment library_assignment) (inherited_item = name_assignment name_assignment) (inherited_item = organization_assignment organization_assignment) (inherited_item = person_assignment person_assignment) (inherited_item = process_product_association process_product_association) (inherited_item = process_property_association process_property_association) (inherited_item = product_definition_relationship product_definition_relationship) (inherited_item = product_related_product_category product_related_product_category)

Table 13 (– Mapping table data_inheritance UoF (uof07)) continued

Application element	AIM element	Source	Rules	Reference path
				(inherited_item = property_definition_relationship property_definition_relationship) (inherited_item = representation_relationship representation_relationship) (inherited_item = shape_aspect_relationship shape_aspect_relationship)
exclusion_of_ association_from_ inheritance to inheritance_of_valid_ associations (as inheritance)	PATH			plant_functional_inheritance_exclusion_assignment <= effectivity_assignment effectivity_assignment.assigned_effectivity ->> effectivity => product_definition_effectivity => inheritance_effectivity
INCLUSION_OF_ ASSOCIATION_AS_VALID_ WITHIN_CONTEXT	plant_functional_ inheritance_inclusion_ assignment	221		plant_functional_inheritance_inclusion_assignment <= effectivity_assignment
inclusion_of_ association_as_valid_ within_context to facility (as context) #1: if facility is a specific_facility #2: if facility is a typical_facility #3: not relevant	PATH			#1: (plant_functional_inheritance_inclusion_assignment <= effectivity_assignment effectivity_assignment.assigned_effectivity ->> effectivity => product_definition_effectivity{=> inheritance_effectivity} product_definition_effectivity.usage ->> product_definition_relationship product_definition_relationship.relating_product_definition ->> product_definition) #2: (plant_functional_inheritance_inclusion_assignment <= effectivity_assignment effectivity_assignment.assigned_effectivity ->> effectivity => product_definition_effectivity{=> inheritance_effectivity} product_definition_effectivity.usage ->> product_definition_relationship product_definition_relationship.relating_product_definition ->> product_definition)

Table 13 (– Mapping table data_inheritance UoF (uof07)) continued

Application element	AIM element	Source	Rules	Reference path
inclusion_of_ association_as_valid_ within_context to inheritable_object (as included)	PATH			plant_functional_inheritance_inclusion_assignment plant_functional_inheritance_inclusion_assignment.items[i] -> inherited_item (inherited_item = action_assignment action_assignment) (inherited_item = action_method_relationship action_method_relationship) (inherited_item = action_relationship action_relationship) (inherited_item = approval_assignment approval_assignment) (inherited_item = document_reference document_reference) (inherited_item = effectivity_assignment effectivity_assignment) (inherited_item = group_assignment group_assignment) (inherited_item = library_assignment library_assignment) (inherited_item = name_assignment name_assignment) (inherited_item = organization_assignment organization_assignment) (inherited_item = person_assignment person_assignment) (inherited_item = process_product_association process_product_association) (inherited_item = process_property_association process_property_association) (inherited_item = product_definition_relationship product_definition_relationship) (inherited_item = product_related_product_category product_related_product_category) (inherited_item = property_definition_relationship property_definition_relationship) (inherited_item = representation_relationship

Table 13 (– Mapping table data_inheritance UoF (uof07)) concluded

Application element	AIM element	Source	Rules	Reference path
				representation_relationship) (inherited_item = shape_aspect_relationship shape_aspect_relationship)
INHERITANCE_OF_VALID_ASSOCIATIONS	inheritance_effectivity	221	2	inheritance_effectivity <= product_definition_effectivity
inheritance_of_valid_associations to facility (as recipient) #1: if facility is a specific_facility #2: if facility is a typical_facility #3: not relevant	PATH			#1: (inheritance_effectivity <= product_definition_effectivity product_definition_effectivity.usage ->product_definition_relationship product_definition_relationship.related_product_definition product_definition) #2: (inheritance_effectivity <= product_definition_effectivity product_definition_effectivity.usage ->product_definition_relationship product_definition_relationship.related_product_definition product_definition)
inheritance_of_valid_associations to facility (as source) #1: if facility is a specific_facility #2: if facility is a typical_facility #3: not relevant	PATH			#1: (inheritance_effectivity <= product_definition_effectivity product_definition_effectivity.usage ->product_definition_relationship product_definition_relationship.relating_product_definition product_definition) #2: (inheritance_effectivity <= product_definition_effectivity product_definition_effectivity.usage ->product_definition_relationship product_definition_relationship.relating_product_definition product_definition)

Table 14 – Mapping table effect UoF (uof08)

Application element	AIM element	Source	Rules	Reference path
BEGINNING_EFFECT	effectivity	41	2	{effectivity.id = 'beginning'}
BEGINNING_OR_END_EFFECT #1: if beginning_or_end_effect relates to activity as a cause	process_or_process_relationship_effectivity	49		process_or_process_relationship_effectivity <= effectivity
#1: beginning_or_end_effect to activity (as cause)	PATH			process_or_process_relationship_effectivity <= effectivity => product_definition_effectivity product_definition_effectivity.usage -> product_definition_relationship characterized_product_definition = product_definition_relationship characterized_product_definition <- process_product_association.defined_product process_product_association process_product_association.process -> (product_definition_process <= action) (product_definition_process <= action action.chosen_method -> action_method)
#1: beginning_or_end_effect to effected_object (as what)	PATH			process_or_process_relationship_effectivity <= effectivity <- effectivity_assignment.assigned_effectivity effectivity_assignment => plant_functional_effectivity_assignment plant_functional_effectivity_assignment.items[i] effectivity_item (effectivity_item = action action) (effectivity_item = action_method action_method) (effectivity_item = assembly_of_facility assembly_of_facility) (effectivity_item = assembly_of_material

Table 14 (– Mapping table effect UoF (uof08)) continued

Application element	AIM element	Source	Rules	Reference path
				assembly_of_material) (effectivity_item = classification_of_class_of_facility classification_of_class_of_facility) (effectivity_item = classification_of_class_of_material classification_of_class_of_material) (effectivity_item = classification_of_facility classification_of_facility) (effectivity_item = classification_of_material classification_of_material) (effectivity_item = collection_of_facility collection_of_facility) (effectivity_item = collection_of_material collection_of_material) (effectivity_item = connection_of_facility connection_of_facility) (effectivity_item = connection_of_material connection_of_material) (effectivity_item = effectivity) (effectivity_item = \ plant_functional_class_of_annotation_element_assignment plant_functional_class_of_annotation_element_assignment) (effectivity_item = \ plant_functional_class_of_information_content_assignment plant_functional_class_of_information_content_assignment) (effectivity_item = \ plant_functional_class_of_involvement_assignment plant_functional_class_of_involvement_assignment) (effectivity_item = \ plant_functional_property_classification_assignment plant_functional_property_classification_assignment) (effectivity_item = \ plant_functional_recognized_possession_of_property_assignment plant_functional_recognized_possession_of_property_assignment) (effectivity_item = product_definition product_definition)

Table 14 (– Mapping table effect UoF (uof08)) continued

Application element	AIM element	Source	Rules	Reference path
#1: beginning_or_ end_effect to point_ in_time (as when)	PATH			process_or_process_relationship_effectivity <= effectivity => product_definition_effectivity <= effectivity <= dated_effectivity dated_effectivity.effectivity_start_date -> date_and_time
#2: if beginning_or_ end_effect relates to beginning_or_end_ effect as cause	plant_functional_ effectivity_assignment	221		plant_functional_effectivity_assignment <= effectivity_assignment
#2: beginning_or_ end_effect to beginning_or_end_ effect (as cause)	PATH			plant_functional_effectivity_assignment <= effectivity_assignment => plant_functional_effectivity_assignment
#2: beginning_or_ end_effect to effected_object (as what)	PATH			plant_functional_effectivity_assignment plant_functional_effectivity_assignment.items[i] effectivity_item (effectivity_item = action action) (effectivity_item = action_method action_method) (effectivity_item = assembly_of_facility assembly_of_facility) (effectivity_item = assembly_of_material assembly_of_material) (effectivity_item = classification_of_class_of_facility classification_of_class_of_facility) (effectivity_item = classification_of_class_of_material classification_of_class_of_material) (effectivity_item = classification_of_facility classification_of_facility) (effectivity_item = classification_of_material classification_of_material) (effectivity_item = collection_of_facility collection_of_facility)

Table 14 (– Mapping table effect UoF (uof08)) continued

Application element	AIM element	Source	Rules	Reference path
				(effectivity_item = collection_of_material collection_of_material) (effectivity_item = connection_of_facility connection_of_facility) (effectivity_item = connection_of_material connection_of_material) (effectivity_item = effectivity) (effectivity_item = \ plant_functional_class_of_annotation_element_assignment plant_functional_class_of_annotation_element_assignment) (effectivity_item = \ plant_functional_class_of_information_content_assignment plant_functional_class_of_information_content_assignment) (effectivity_item = \ plant_functional_class_of_involvement_assignment plant_functional_class_of_involvement_assignment) (effectivity_item = \ plant_functional_property_classification_assignment plant_functional_property_classification_assignment) (effectivity_item = \ plant_functional_recognized_possession_of_property_assignment plant_functional_recognized_possession_of_property_assignment) (effectivity_item = product_definition product_definition)
#2: beginning_or_ end_effect to point_ in_time (as when)	PATH			plant_functional_effectivity_assignment <= effectivity_assignment effectivity_assignment.assigned_effectivity -> effectivity <= dated_effectivity dated_effectivity.effectivity_start_date -> date_and_time
beginning_or_end_ effect to point_in_ space (as where)	PATH			effectivity => placed_effectivity <= characterized_object = characterized_definition <- property_definition.definition

Table 14 (– Mapping table effect UoF (uof08)) concluded

Application element	AIM element	Source	Rules	Reference path
				property_definition <- property_definition_representation.definition property_definition_representation property_definition_representation.used_representation -> representation representation.items[1] -> representation_item => geometric_representation_item => point
DATE_AND_TIME	date_and_time	41		
DESCRIPTION_OF_POINT_IN_TIME_BY_DATE_AND_TIME	date_and_time	41		
description_of_point_in_time_by_date_in_time to date_and_time (as describing)	IDENTICAL MAPPING			
description_of_point_in_time_by_date_in_time to point_in_time (as described)	IDENTICAL MAPPING			
END_EFFECT	effectivity	41	2	{effectivity.id = 'end'}
POINT_IN_TIME	date_and_time	41		

Table 15 – Mapping table hierarchical_decomposition UoF (uof09)

Application element	AIM element	Source	Rules	Reference path
COLLECTION_OF_ COMPOSITION_OF_ FACILITY_INTO_ HIERARCHY	specified_higher_usage_ occurrence	44		
#1: collection_of_ composition_of_ facility_into_ hierarchy to composition_of_ facility (as part) if collection_of_ composition_of_facility_ into_hierarchy refers to a composition_of_facility which is an assembly	PATH			specified_higher_usage_occurrence <= assembly_component_usage <= product_definition_usage <= product_definition_relationship product_definition_relationship.related_product_definition -> product_definition <- product_definition_relationship.related_product_definition product_definition_relationship => product_definition_usage => assembly_component_usage {=> next_assembly_usage_occurrence} => assembly_of_facility
#2: collection_of_ composition_of_ facility_into_ hierarchy to composition_of_ facility (as part) if collection_of_ composition_of_facility_ into_hierarchy refers to a composition_of_facility which is a collection	PATH			specified_higher_usage_occurrence <= assembly_component_usage <= product_definition_usage <= product_definition_relationship product_definition_relationship.related_product_definition -> product_definition <- product_definition_relationship.related_product_definition product_definition_relationship => product_definition_usage => collection_of_facility
collection_of_ composition_of_ facility_into_ hierarchy to hierarchy_of_ composition_of_ facility (as whole)	PATH			specified_higher_usage_occurrence <= assembly_component_usage <= product_definition_usage <= product_definition_relationship product_definition_relationship.relating_product_definition -> product_definition

Table 15 (– Mapping table hierarchical_decomposition UoF (uof09)) continued

Application element	AIM element	Source	Rules	Reference path
COLLECTION_OF_ COMPOSITION_OF_ MATERIAL_INTO_ HIERARCHY	specified_higher_usage_ occurrence	41		
#1: collection_of_ composition_of_ material_into_ hierarchy to composition_of_ facility (as part) if collection_of_ composition_of_facility_ into_hierarchy refers to a composition_of_material which is an assembly	PATH			specified_higher_usage_occurrence <= assembly_component_usage <= product_definition_usage <= product_definition_relationship product_definition_relationship.related_product_definition -> product_definition <- product_definition_relationship.related_product_definition product_definition_relationship => product_definition_usage => assembly_component_usage {=> next_assembly_usage_occurrence} => assembly_of_material
#2: collection_of_ composition_of_ material_into_ hierarchy to composition_of_ facility (as part) if collection_of_ composition_of_facility_ into_hierarchy refers to a composition_of_material which is a collection	PATH			specified_higher_usage_occurrence <= assembly_component_usage <= product_definition_usage <= product_definition_relationship product_definition_relationship.related_product_definition -> product_definition <- product_definition_relationship.related_product_definition product_definition_relationship => product_definition_usage => collection_of_material
collection_of_ composition_of_ material_into_ hierarchy to hierarchy_of_ composition_of_ facility (as whole)	PATH			specified_higher_usage_occurrence <= assembly_component_usage <= product_definition_usage <= product_definition_relationship product_definition_relationship.relating_product_definition -> product_definition

Table 15 (– Mapping table hierarchical_decomposition UoF (uof09)) continued

Application element	AIM element	Source	Rules	Reference path
HIERARCHY_OF_ COMPOSITION_OF_ FACILITY	product_definition	41		
HIERARCHY_OF_ COMPOSITION_OF_ MATERIAL	product_definition	41		
VALID_CONTEXT_FOR_ HIERARCHY_OF_ COMPOSITION_OF_ FACILITY #1: if hierarchy_context_ object is an activity	plant_functional_context_ for_hierarchy_action_ assignment	221		plant_functional_context_for_hierarchy_action_assignment <= action_assignment
#1: valid_context_ for_hierarchy_of_ composition_of_ facility to hierarchy_of_ composition_of_ facility (as hierarchy)	PATH			plant_functional_context_for_hierarchy_action_assignment plant_functional_context_for_hierarchy_action_assignment.items[i] hierarchy_context_item hierarchy_context_item = product_definition product_definition
#1: valid_context_ for_hierarchy_of_ composition_of_ facility to activity (as context)	PATH			plant_functional_context_for_hierarchy_action_assignment <= action_assignment action_assignment.assigned_action -> (action) (action action.chosen_action -> action_method)
#2: if hierarchy_ context_object is a class of activity	plant_functional_context_ for_hierarchy_group_ assignment	221		plant_functional_context_for_hierarchy_group_assignment <= group_assignment

Table 15 (– Mapping table hierarchical_decomposition UoF (uof09)) continued

Application element	AIM element	Source	Rules	Reference path
#2: valid_context_ for_hierarchy_of_ composition_of_ facility to hierarchy_of_ composition_of_ facility (as hierarchy)	PATH			plant_functional_context_for_hierarchy_group_assignment plant_functional_context_for_hierarchy_group_assignment.items[i] hierarchy_context_item hierarchy_context_item = product_definition product_definition
#2: valid_context_ for_hierarchy_of_ composition_of_ facility to class_of_ activity (as context)	PATH			plant_functional_context_for_hierarchy_group_assignment <= group_assignment group_assignment.assigned_group -> group => class_of_activity
#3: if hierarchy_ context_object is an organization	plant_functional_context_ for_hierarchy_organization_ assignment	221		plant_functional_context_for_hierarchy_organization_assignment <= organization_assignment
#3: valid_context_ for_hierarchy_of_ composition_of_ facility to hierarchy_of_ composition_of_ facility (as hierarchy)	PATH			plant_functional_context_for_hierarchy_organization_assignment plant_functional_context_for_hierarchy_organization_assignment.items[i] hierarchy_context_item hierarchy_context_item = product_definition product_definition
#3: valid_context_ for_hierarchy_of_ composition_of_ facility to organization (as context)	PATH			plant_functional_context_for_hierarchy_organization_assignment <= organization_assignment organization_assignment.assigned_organization -> organization

Table 15 (– Mapping table hierarchical_decomposition UoF (uof09)) continued

Application element	AIM element	Source	Rules	Reference path
VALID_CONTEXT_FOR_ HIERARCHY_OF_ COMPOSITION_OF_ MATERIAL #1: if hierarchy_context_ object is an activity	plant_functional_context_ for_hierarchy_action_ assignment	221		plant_functional_context_for_hierarchy_action_assignment <= action_assignment
#1: valid_context_ for_hierarchy_of_ composition_of_ material to hierarchy_of_ composition_of_ material (as hierarchy)	PATH			plant_functional_context_for_hierarchy_action_assignment plant_functional_context_for_hierarchy_action_assignment.items[i] hierarchy_context_item hierarchy_context_item = product_definition product_definition
#1: valid_context_ for_hierarchy_of_ composition_of_ material to activity (as context)	PATH			plant_functional_context_for_hierarchy_action_assignment <= action_assignment action_assignment.assigned_action -> (action) (action action.chosen_action -> action_method)
#2: if hierarchy_ context_object is a class of activity	plant_functional_context_ for_hierarchy_group_ assignment	221		plant_functional_context_for_hierarchy_group_assignment <= group_assignment
#2: valid_context_ for_hierarchy_of_ composition_of_ material to hierarchy_of_ composition_of_ material (as hierarchy)	PATH			plant_functional_context_for_hierarchy_group_assignment plant_functional_context_for_hierarchy_group_assignment.items[i] hierarchy_context_item hierarchy_context_item = product_definition product_definition

Table 15 (– Mapping table hierarchical_decomposition UoF (uof09)) concluded

Application element	AIM element	Source	Rules	Reference path
#2: valid_context_ for_hierarchy_of_ composition_of_ material to class_of_ activity (as context)	PATH			plant_functional_context_for_hierarchy_group_assignment <= group_assignment group_assignment.assigned_group -> group <= class_of_activity
#3: if hierarchy_ context_object is an organization	plant_functional_context_ for_hierarchy_organization_ assignment	221		plant_functional_context_for_hierarchy_organization_assignment <= organization_assignment
#3: valid_context_ for_hierarchy_of_ composition_of_ material to hierarchy_of_ composition_of_ material (as hierarchy)	PATH			plant_functional_context_for_hierarchy_organization_assignment plant_functional_context_for_hierarchy_organization_assignment.items[i] hierarchy_context_item hierarchy_context_item = product_definition product_definition
#3: valid_context_ for_hierarchy_of_ composition_of_ material to organization (as context)	PATH			plant_functional_context_for_hierarchy_organization_assignment <= organization_assignment organization_assignment.assigned_organization -> organization

Table 16 – Mapping table identification UoF (uof10)

Application element	AIM element	Source	Rules	Reference path
DATA_RECORD	plant_functional_data_record_name_assignment	221		plant_functional_data_record_name_assignment <= name_assignment
identifier	name_assignment.assigned_name	41		plant_functional_data_record_name_assignment <= name_assignment name_assignment.assigned_name
data_record to recorded_object (as subject)	PATH			plant_functional_data_record_name_assignment plant_functional_data_record_name_assignment.items[i] -> named_item (named_item = action action) (named_item = action_assignment action_assignment) (named_item = action_method action_method) (named_item = action_property action_property) (named_item = action_relationship action_relationship) (named_item = annotation_fill_area annotation_fill_area) (named_item = annotation_occurrence annotation_occurrence) (named_item = annotation_occurrence_relationship annotation_occurrence_relationship) (named_item = annotation_symbol annotation_symbol) (named_item = annotation_text annotation_text) (named_item = approval_status approval_status) (named_item = assembly_component_usage_substitute assembly_component_usage_substitute) (named_item = axis2_placement_2d axis2_placement_2d) (named_item = class_of_facility class_of_facility)

Table 16 (– Mapping table identification UoF (uof10)) continued

Application element	AIM element	Source	Rules	Reference path
				(named_item = class_of_facility_assembly_constraint class_of_facility_assembly_constraint) (named_item = class_of_facility_connection_constraint class_of_facility_connection_constraint) (named_item = class_of_material class_of_material) (named_item = class_of_material_assembly_constraint class_of_material_assembly_constraint) (named_item = class_of_material_connection_constraint class_of_material_connection_constraint) (named_item = classification_of_class_of_facility classification_of_class_of_facility) (named_item = classification_of_class_of_material classification_of_class_of_material) (named_item = classification_of_facility classification_of_facility) (named_item = classification_of_material classification_of_material) (named_item = colour_rgb colour_rgb) (named_item = composite_text composite_text) (named_item = connection_of_facility connection_of_facility) (named_item = connection_of_material connection_of_material) (named_item = curve curve) (named_item = date_and_time date_and_time) (named_item = defined_symbol defined_symbol) (named_item = descriptive_representation_item descriptive_representation_item) (named_item = direction_range_for_connector_feature direction_range_for_connector_feature)

Table 16 (– Mapping table identification UoF (uof10)) continued

Application element	AIM element	Source	Rules	Reference path
				(named_item = document document) (named_item = document_reference document_reference) (named_item = document_relationship document_relationship) (named_item = drawing_revision drawing_revision) (named_item = drawing_sheet_revision drawing_sheet_revision) (named_item = drawing_sheet_revision_usage drawing_sheet_revision_usage) (named_item = effectivity effectivity) (named_item = effectivity_assignment effectivity_assignment) (named_item = fill_area_style_hatching fill_area_style_hatching) (named_item = fill_area_style_tiles fill_area_style_tiles) (named_item = group group) (named_item = group_assignment group_assignment) (named_item = group_relationship group_relationship) (named_item = inheritance_effectivity inheritance_effectivity) (named_item = library_assignment library_assignment) (named_item = library_context library_context) (named_item = measure_representation_item measure_representation_item) (named_item = organization organization)

Table 16 (– Mapping table identification UoF (uof10)) continued

Application element	AIM element	Source	Rules	Reference path
				(named_item = organization_relationship organization_relationship) (named_item = person person) (named_item = person_and_organization person_and_organization) (named_item = planar_extent planar_extent) (named_item = point point) (named_item = positive_ratio_measure positive_ratio_measure) (named_item = presentation_layer_assignment presentation_layer_assignment) (named_item = presentation_layer_usage presentation_layer_usage) (named_item = presentation_representation_relationship presentation_representation_relationship) (named_item = presented_item_representation presented_item_representation) (named_item = process_product_association process_product_association) (named_item = process_property_association process_property_association) (named_item = product_definition product_definition) (named_item = product_definition_process product_definition_process) (named_item = product_definition_relationship product_definition_relationship) (named_item = product_definition_shape product_definition_shape) (named_item = product_property_process product_property_process) (named_item = property_definition property_definition)

Table 16 (– Mapping table identification UoF (uof10)) continued

Application element	AIM element	Source	Rules	Reference path
				(named_item = property_definition_alternative property_definition_alternative) (named_item = property_definition_derivation property_definition_derivation) (named_item = property_definition_representation property_definition_representation) (named_item = property_definition_version property_definition_version) (named_item = recognized_class_of_resource recognized_class_of_resource) (named_item = recognized_class_of_service recognized_class_of_service) (named_item = recognized_provision_of_service_according_to_class recognized_provision_of_service_according_to_class) (named_item = reference_between_page_connector reference_between_page_connector) (named_item = representation representation) (named_item = representation_relationship representation_relationship) (named_item = serial_action_method serial_action_method) (named_item = shape_aspect shape_aspect) (named_item = shape_aspect_relationship shape_aspect_relationship) (named_item = symbol_target symbol_target) (named_item = text_literal text_literal) (named_item = text_style_with_box_characteristics text_style_with_box_characteristics) (named_item = view_dependent_invisibility view_dependent_invisibility)

Table 16 (– Mapping table identification UoF (uof10)) continued

Application element	AIM element	Source	Rules	Reference path
IDENTIFICATION_OF_ OBJECT_BY_ INFORMATION_CONTENT	plant_functional_ identification_assignment	221		plant_functional_identification_assignment <= identification_assignment
identification_of_ object_by_ information_content to information_ content (as describing)	PATH	41		plant_functional_identification_assignment <= identification_assignment identification_assignment.assigned_id
identification_of_ object_by_ information_content to identified_object (as described)	PATH			plant_functional_identification_assignment plant_functional_identification_assignment.items[i] -> identified_item (identified_item = action action) (identified_item = action_method action_method) (identified_item = class_of_activity class_of_activity) (identified_item = effectivity effectivity) (identified_item = plant_functional_approval_assignment plant_functional_approval_assignment) (identified_item = class_of_information_content class_of_information_content) (identified_item = class_of_facility class_of_facility) (identified_item = class_of_involvement class_of_involvement) (identified_item = class_of_material class_of_material) (identified_item = connection_of_facility connection_of_facility) (identified_item = connection_of_material connection_of_material) (identified_item = product_definition product_definition)

Table 16 (– Mapping table identification UoF (uof10)) continued

Application element	AIM element	Source	Rules	Reference path
				(identified_item = shape_aspect shape_aspect) (identified_item = information_content_representation information_content_representation) (identified_item = organization organization) (identified_item = person person) (identified_item = property_definition property_definition) (identified_item = provision_of_service provision_of_service) (identified_item = descriptive_representation_item descriptive_representation_item) (identified_item = date_and_time date_and_time)
MAINTENANCE_OF_ IDENTIFICATION_ SCHEME	plant_functional_ organization_assignment	221		{plant_functional_organization_assignment <= organization_assignment organization_assignment.role = 'identification scheme of maintainer'}
maintenance_of_ identification_ scheme to class_of_ information_content (as scheme)	PATH			plant_functional_organization_assignment plant_functional_organization_assignment.items[i] -> class_of_information_content_library_item class_of_information_content_library_item = class_of_information_content class_of_information_content
maintenance_of_ identification_ scheme to organization (as maintainer)	PATH			plant_functional_organization_assignment <= organization_assignment organization_assignment.assigned_organization -> organization
VALID_CONTEXT_FOR_ IDENTIFICATION #1: if identification_ context_object is an Activity	plant_functional_action_ identification_context_ assignment	221		plant_functional_action_identification_context_assignment <= action_assignment

Table 16 (– Mapping table identification UoF (uof10)) continued

Application element	AIM element	Source	Rules	Reference path
#1: valid_context_ for_identification to identification_of_ object_by_ information_content (as identification)	PATH			plant_functional_action_identification_context_assignment plant_functional_action_identification_context_assignment.items[i] -> identification_context_item identification_context_item = external_source external_source <- external_identification.source external_identification <- external_identification_assignment.assigned_identification external_identification_assignment => plant_functional_identification_assignment
#1: valid_context_ for_identification to identification_ context_object (as context)	PATH			plant_functional_action_identification_context_assignment <= action_assignment action_assignment.assigned_action -> (action) (action action.chosen_method -> action_method
#2: if identification_ context_object is a Class_of_activity	plant_functional_group_ identification_context_ assignment	221		plant_functional_group_identification_context_assignment <= group_assignment
#2: valid_context_ for_identification to identification_of_ object_by_ information_content (as identification)	PATH			plant_functional_group_identification_context_assignment plant_functional_group_identification_context_assignment.items[i] -> identification_context_item identification_context_item = external_source external_source <- external_identification.source external_identification <- external_identification_assignment.assigned_identification external_identification_assignment => plant_functional_identification_assignment

Table 16 (– Mapping table identification UoF (uof10)) continued

Application element	AIM element	Source	Rules	Reference path
#2: valid_context_ for_identification to identification_ context_object (as context)	PATH			plant_functional_group_identification_context_assignment <= group_assignment group_assignment.assigned_group -> group => class_of_activity
#3: if identification_ context_object is an Organization	plant_functional_ organization_assignment	221		{plant_functional_organization_assignment <= organization_assignment organization_assignment.role -> organization_role organization_role.name = 'context for identification'}
#3: valid_context_ for_identification to identification_of_ object_by_ information_content (as identification)	PATH			plant_functional_organization_assignment plant_functional_organization_assignment.items[i] -> organization_item organization_item = external_source <- external_identification.source external_identification <- external_identification_assignment.assigned_identification external_identification_assignment => plant_functional_identification_assignment
#3: valid_context_ for_identification to identification_ context_object (as context)	PATH			plant_functional_organization_assignment <= organization_assignment organization_assignment.assigned_organization organization
#4: if identification_ context_object is a facility or material	[external_source_product_ definition_alias]	221		{external_source_product_definition_alias <= external_source external_source.source_id = product_definition.id}
	[product_definition]	41		
#4: valid_context_ for_identification to identification_of_ object_by_ information_content (as identification)	PATH			external_source_product_definition_alias = external_source <- external_identification.source external_identification <- external_identification_assignment.assigned_identification external_identification_assignment => plant_functional_identification_assignment

Table 16 (– Mapping table identification UoF (uof10)) concluded

Application element	AIM element	Source	Rules	Reference path
#4: valid_context_ for_identification to identification_ context_object (as context)	PATH			external_source_product_definition_alias <= external_source external_source.source_id = product_definition.id product_definition

Table 17 – Mapping table information_and_document UoF (uof11)

Application element	AIM element	Source	Rules	Reference path
BINARY_OBJECT	binary_object_ representation	221		binary_object_representation <= representation
content	externally_defined_ representation_item	221		binary_object_representation <= representation representation.items[i] -> representation_item => externally_defined_representation_item
CLASS_OF_INFORMATION_ CONTENT #1: if class_of_ information_content is user defined #2: if class_of_ information_content is defined in this part of ISO 10303 #3: if class_of_ information_content is externally defined	#1: (class_of_information_ content) #2: (standard_class_of_ information_content) #3: (externally_defined_ class_of_information_ content)	221 221 221		#1: (class_of_information_content <= group) #2: (standard_class_of_information_content <= [class_of_information_content <= group] [pre-defined_item]) #3: (externally_defined_class_of_information_content <= [class_of_information_content <= group] [externally-defined_item])
CLASS_OF_INFORMATION_ CONTENT_HELD_BY_ INFORMATION_CARRIER	plant_functional_class_of_ information_held_by_ information_carrier_ assignment	221		plant_functional_class_of_information_held_by_information_\ carrier_assignment <= group_assignment
class_of_information_ held_by_information_ carrier to class_of_ information_content (as held)	PATH			plant_functional_class_of_information_held_by_\ information_carrier_assignment <= group_assignment group_assignment.assigned_group -> group => class_of_information_content

Table 17 (– Mapping table information_and_document UoF (uof11)) continued

Application element	AIM element	Source	Rules	Reference path
class_of_information_ content_held_by_ information_carrier to logical_ information_carrier (as holder)	PATH			plant_functional_class_of_information_held_by_information_\ carrier_assignment plant_functional_class_of_information_held_by_information_\ carrier_assignment.items[i] -> information_carrier_item information_carrier_item = product_definition product_definition
class_of_information_ content_held_by_ information_carrier to physical_ information_carrier (as holder)	PATH			plant_functional_class_of_information_held_by_information_\ carrier_assignment plant_functional_class_of_information_held_by_information_\ carrier_assignment.items[i] -> information_carrier_item information_carrier_item = product_definition product_definition
CLASSIFICATION_OF_ INFORMATION_CONTENT	plant_functional_class_of_ information_content_ assignment	221		plant_functional_class_of_information_content_assignment <= group_assignment
classification_of_ information_content to class_of_ information_content (as classifier)	PATH			plant_functional_class_of_information_content_assignment <= group_assignment group_assignment.assigned_group -> group => class_of_information_content
classification_of_ information_content to information_ content (as classified)	PATH			plant_functional_class_of_information_content_assignment plant_functional_class_of_information_content_assignment.item[i] information_content_item information_content_item = representation_context representation_context
DEFINITION_OF_OBJECT_ BY_INFORMATION_ CONTENT	plant_functional_ information_content_ definition_assignment	221		plant_functional_information_content_definition_assignment <= plant_functional_information_content_description_assignment
DEFINITION_OF_OBJECT_ VIA_INFORMATION_ CARRIER	plant_functional_ information_carrier_ definition_assignment	221		plant_functional_information_carrier_definition_assignment <= plant_functional_information_carrier_description_assignment

Table 17 (– Mapping table information_and_document UoF (uof11)) continued

Application element	AIM element	Source	Rules	Reference path
DESCRIPTION_OF_ OBJECT_BY_ INFORMATION_CONTENT #1: if description_of_ object_by_information_ content is either a reference or a definition #2: if description_of_ object_by_information_ content is a definition #3: if description_of_ object_by_information_ content is a reference	#1: (plant_functional_ information_content_ description_assignment) #2: (plant_functional_ information_content_ definition_assignment) #3: (plant_functional_ information_content_ reference_assignment)	221 221 221		#1: (plant_functional_information_content_description_assignment <= property_definition_representation) #2: (plant_functional_information_content_definition_assignment <= plant_functional_information_content_description_assignment <= property_definition_representation) #3: (plant_functional_information_content_reference_assignment <= plant_functional_information_content_description_assignment <= property_definition_representation)
description_of_ object_by_ information_content to information_ content (as describing)	PATH			plant_functional_information_content_description_assignment <= property_definition_representation property_definition_representation.used_representation -> representation
description_of_ object_by_ information_content to described_object (as described)	PATH			plant_functional_information_content_description_assignment plant_functional_information_content_description_assignment.items[i] -> described_item (described_item = action action) (described_item = action_assignment action_assignment) (described_item = action_method action_method) (described_item = action_property action_property) (described_item = action_relationship action_relationship) (described_item = annotation_fill_area annotation_fill_area)

Table 17 (– Mapping table information_and_document UoF (uof11)) continued

Application element	AIM element	Source	Rules	Reference path
				(described_item = annotation_occurrence annotation_occurrence) (described_item = annotation_occurrence_relationship annotation_occurrence_relationship) (described_item = annotation_symbol annotation_symbol) (described_item = annotation_text annotation_text) (described_item = approval_status approval_status) (described_item = assembly_component_usage_substitute assembly_component_usage_substitute) (described_item = axis2_placement_2d axis2_placement_2d) (described_item = class_of_facility class_of_facility) (described_item = class_of_facility_assembly_constraint class_of_facility_assembly_constraint) (described_item = class_of_facility_connection_constraint class_of_facility_connection_constraint) (described_item = class_of_material class_of_material) (described_item = class_of_material_assembly_constraint class_of_material_assembly_constraint) (described_item = class_of_material_connection_constraint class_of_material_connection_constraint) (described_item = classification_of_class_of_facility classification_of_class_of_facility) (described_item = classification_of_class_of_material classification_of_class_of_material) (described_item = classification_of_facility classification_of_facility) (described_item = classification_of_material classification_of_material) (described_item = colour_rgb colour_rgb)

Table 17 (– Mapping table information_and_document UoF (uof11)) continued

Application element	AIM element	Source	Rules	Reference path
				(described_item = composite_text composite_text) (described_item = connection_of_facility connection_of_facility) (described_item = connection_of_material connection_of_material) (described_item = curve curve) (described_item = date_and_time date_and_time) (described_item = defined_symbol defined_symbol) (described_item = descriptive_representation_item descriptive_representation_item) (described_item = direction_range_for_connector_feature direction_range_for_connector_feature) (described_item = document document) (described_item = document_reference document_reference) (described_item = document_relationship document_relationship) (described_item = drawing_revision drawing_revision) (described_item = drawing_sheet_revision drawing_sheet_revision) (described_item = drawing_sheet_revision_usage drawing_sheet_revision_usage) (described_item = effectivity effectivity) (described_item = effectivity_assignment effectivity_assignment) (described_item = fill_area_style_hatching fill_area_style_hatching) (described_item = fill_area_style_tiles fill_area_style_tiles)

Table 17 (– Mapping table information_and_document UoF (uof11)) continued

Application element	AIM element	Source	Rules	Reference path
				(described_item = group group) (described_item = group_assignment group_assignment) (described_item = group_relationship group_relationship) (described_item = inheritance_effectivity inheritance_effectivity) (described_item = library_assignment library_assignment) (described_item = library_context library_context) (described_item = measure_representation_item measure_representation_item) (described_item = organization organization) (described_item = organization_relationship organization_relationship) (described_item = person person) (described_item = person_and_organization person_and_organization) (described_item = planar_extent planar_extent) (described_item = point point) (described_item = positive_ratio_measure positive_ratio_measure) (described_item = presentation_layer_assignment presentation_layer_assignment) (described_item = presentation_layer_usage presentation_layer_usage) (described_item = presentation_representation_relationship presentation_representation_relationship) (described_item = presented_item_representation presented_item_representation)

Table 17 (– Mapping table information_and_document UoF (uof11)) continued

Application element	AIM element	Source	Rules	Reference path
				(described_item = process_product_association process_product_association) (described_item = process_property_association process_property_association) (described_item = product_definition product_definition) (described_item = product_definition_process product_definition_process) (described_item = product_definition_relationship product_definition_relationship) (described_item = product_definition_shape product_definition_shape) (described_item = product_property_process product_property_process) (described_item = property_definition property_definition) (described_item = property_definition_alternative property_definition_alternative) (described_item = property_definition_derivation property_definition_derivation) (described_item = property_definition_representation property_definition_representation) (described_item = property_definition_version property_definition_version) (described_item = recognized_class_of_resource recognized_class_of_resource) (described_item = recognized_class_of_service recognized_class_of_service) (described_item = recognized_provision_of_service_according_to_class recognized_provision_of_service_according_to_class) (described_item = reference_between_page_connector reference_between_page_connector) (described_item = representation representation) (described_item = representation_relationship representation_relationship)

Table 17 (– Mapping table information_and_document UoF (uof11)) continued

Application element	AIM element	Source	Rules	Reference path
				(described_item = serial_action_method serial_action_method) (described_item = shape_aspect shape_aspect) (described_item = shape_aspect_relationship) (described_item = symbol_target symbol_target) (described_item = text_literal text_literal) (described_item = text_style_with_box_characteristics text_style_with_box_characteristics) (described_item = view_dependent_invisibility view_dependent_invisibility)
DESCRIPTION_OF_ OBJECT_VIA_ INFORMATION_CARRIER #1: if description_of_ object_via_information_ carrier is either a reference or a definition #2: if description_of_ object_via_information_ carrier is a definition #3: if description_of_ object_via_information_ carrier is a reference	#1: (plant_functional_ information_carrier_ description_assignment) #2: (plant_functional_ information_carrier_ definition_assignment) #3: (plant_functional_ information_carrier_ reference_assignment)	221 221 221		#1: (plant_functional_information_carrier_description_assignment <= document_reference) #2: (plant_functional_information_carrier_definition_assignment <= plant_functional_information_carrier_description_assignment <= document_reference) #3: (plant_functional_information_carrier_reference_assignment <= plant_functional_information_carrier_description_assignment <= document_reference)
description_of_ object_via_ information_carrier to logical_ information_carrier (as describing)	PATH			plant_functional_information_carrier_description_assignment <= document_reference document_reference.assigned_document ->) document <- product_definition_with_associated_documents.documentation_ids[i] product_definition_with_associated_documents <= product_definition

Table 17 (– Mapping table information_and_document UoF (uof11)) continued

Application element	AIM element	Source	Rules	Reference path
description_of_ object_via_ information_carrier to physical_ information_carrier (as describing)	PATH			plant_functional_information_carrier_description_assignment <= document_reference document_reference.assigned_document ->> document <- product_definition_with_associated_documents.documentation_ids[i] product_definition_with_associated_documents <= product_definition
description_of_ object_via_ information_carrier to described_object (as described)	PATH			plant_functional_information_carrier_description_assignment plant_functional_information_carrier_description_assignment.items[i] ->> described_item (described_item = action action) (described_item = action_assignment action_assignment) (described_item = action_method action_method) (described_item = action_property action_property) (described_item = action_relationship action_relationship) (described_item = annotation_fill_area annotation_fill_area) (described_item = annotation_occurrence annotation_occurrence) (described_item = annotation_occurrence_relationship annotation_occurrence_relationship) (described_item = annotation_symbol annotation_symbol) (described_item = annotation_text annotation_text) (described_item = approval_status approval_status) (described_item = assembly_component_usage_substitute assembly_component_usage_substitute) (described_item = axis2_placement_2d axis2_placement_2d)

Table 17 (– Mapping table information_and_document UoF (uof11)) continued

Application element	AIM element	Source	Rules	Reference path
				(described_item = class_of_facility class_of_facility) (described_item = class_of_facility_assembly_constraint class_of_facility_assembly_constraint) (described_item = class_of_facility_connection_constraint class_of_facility_connection_constraint) (described_item = class_of_material class_of_material) (described_item = class_of_material_assembly_constraint class_of_material_assembly_constraint) (described_item = class_of_material_connection_constraint class_of_material_connection_constraint) (described_item = classification_of_class_of_facility classification_of_class_of_facility) (described_item = classification_of_class_of_material classification_of_class_of_material) (described_item = classification_of_facility classification_of_facility) (described_item = classification_of_material classification_of_material) (described_item = colour_rgb colour_rgb) (described_item = composite_text composite_text) (described_item = connection_of_facility connection_of_facility) (described_item = connection_of_material connection_of_material) (described_item = curve curve) (described_item = date_and_time date_and_time) (described_item = defined_symbol defined_symbol) (described_item = descriptive_representation_item descriptive_representation_item)

Table 17 (– Mapping table information_and_document UoF (uof11)) continued

Application element	AIM element	Source	Rules	Reference path
				(described_item = direction_range_for_connector_feature direction_range_for_connector_feature) (described_item = document document) (described_item = document_reference document_reference) (described_item = document_relationship document_relationship) (described_item = drawing_revision drawing_revision) (described_item = drawing_sheet_revision drawing_sheet_revision) (described_item = drawing_sheet_revision_usage drawing_sheet_revision_usage) (described_item = effectivity effectivity) (described_item = effectivity_assignment effectivity_assignment) (described_item = fill_area_style_hatching fill_area_style_hatching) (described_item = fill_area_style_tiles fill_area_style_tiles) (described_item = group group) (described_item = group_assignment group_assignment) (described_item = group_relationship group_relationship) (described_item = inheritance_effectivity inheritance_effectivity) (described_item = library_assignment library_assignment) (described_item = library_context library_context) (described_item = measure_representation_item measure_representation_item)

Table 17 (– Mapping table information_and_document UoF (uof11)) continued

Application element	AIM element	Source	Rules	Reference path
				(described_item = organization organization) (described_item = organization_relationship organization_relationship) (described_item = person person) (described_item = person_and_organization person_and_organization) (described_item = planar_extent planar_extent) (described_item = point point) (described_item = positive_ratio_measure positive_ratio_measure) (described_item = presentation_layer_assignment presentation_layer_assignment) (described_item = presentation_layer_usage presentation_layer_usage) (described_item = presentation_representation_relationship presentation_representation_relationship) (described_item = presented_item_representation presented_item_representation) (described_item = process_product_association process_product_association) (described_item = process_property_association process_property_association) (described_item = product_definition product_definition) (described_item = product_definition_process product_definition_process) (described_item = product_definition_relationship product_definition_relationship) (described_item = product_definition_shape product_definition_shape) (described_item = product_property_process product_property_process)

Table 17 (– Mapping table information_and_document UoF (uof11)) continued

Application element	AIM element	Source	Rules	Reference path
				(described_item = property_definition property_definition) (described_item = property_definition_alternative property_definition_alternative) (described_item = property_definition_derivation property_definition_derivation) (described_item = property_definition_representation property_definition_representation) (described_item = property_definition_version property_definition_version) (described_item = recognized_class_of_resource recognized_class_of_resource) (described_item = recognized_class_of_service recognized_class_of_service) (described_item = recognized_provision_of_service_according_to_class recognized_provision_of_service_according_to_class) (described_item = reference_between_page_connector reference_between_page_connector) (described_item = representation representation) (described_item = representation_relationship representation_relationship) (described_item = serial_action_method serial_action_method) (described_item = shape_aspect shape_aspect) (described_item = shape_aspect_relationship) (described_item = symbol_target symbol_target) (described_item = text_literal text_literal) (described_item = text_style_with_box_characteristics text_style_with_box_characteristics) (described_item = view_dependent_invisibility view_dependent_invisibility)

Table 17 (– Mapping table information_and_document UoF (uof11)) continued

Application element	AIM element	Source	Rules	Reference path
HOLDING_OF_ INFORMATION_CONTENT_ BY_INFORMATION_ CARRIER	property_definition_ representation	41		{property_definition_representation property_definition_representation.definition -> property_definition property_definition.name = 'carried information'}
holding_of_ information_content_ by_information_ carrier to logical_ information_carrier (as holder)	PATH			property_definition_representation property_definition_representation.definition -> property_definition property_definition.definition -> characterized_definition characterized_definition = characterized_product_definition characterized_product_definition = product_definition product_definition
holding_of_ information_content_ by_information_ carrier to physical_ information_carrier (as holder)	PATH			property_definition_representation property_definition_representation.definition -> property_definition property_definition.definition -> characterized_definition characterized_definition = characterized_product_definition characterized_product_definition = product_definition product_definition
holding_of_ information_content_ by_information_ carrier to information_content (as held)	PATH			property_definition_representation property_definition_representation.used_representation -> representation
INFORMATION_CONTENT	representation	43		

Table 17 (– Mapping table information_and_document UoF (uof11)) continued

Application element	AIM element	Source	Rules	Reference path
LOGICAL_INFORMATION_CARRIER #1: if logical_information_carrier is a specific facility #2: if logical_information_carrier is a typical facility	product_definition	41		{product_definition product_definition.frame_of_reference ->product_definition_context <= application_context_element (#1: {application_context_element.name = 'functional occurrence'}) (#2: {application_context_element.name = 'functional description'}) application_context_element.frame_of_reference ->application_context application_context.application = ' information holder'}
PHYSICAL_INFORMATION_CARRIER #1: if physical_information_carrier is a specific material #2: if physical_information_carrier is a typical material	product_definition	41		{product_definition product_definition.frame_of_reference ->product_definition_context <= application_context_element (#1: {application_context_element.name = 'physical occurrence'}) (#2: {application_context_element.name = 'physical description'}) application_context_element.frame_of_reference ->application_context application_context.application = ' information holder'}
REFERENCE_BETWEEN_INFORMATION_CARRIER	product_definition_relationship	41		
reference_between_information_carrier to logical_information_carrier (as referenced)	PATH			product_definition_relationship product_definition_relationship.related_product_definition product_definition
reference_between_information_carrier to physical_information_carrier (as referenced)	PATH			product_definition_relationship product_definition_relationship.related_product_definition product_definition
reference_between_information_carrier to logical_information_carrier (as referencing)	PATH			product_definition_relationship product_definition_relationship.relating_product_definition product_definition

Table 17 (– Mapping table information_and_document UoF (uof11)) concluded

Application element	AIM element	Source	Rules	Reference path
reference_between_ information_carrier to physical_ information_carrier (as referencing)	PATH			product_definition_relationship product_definition_relationship.relating_product_definition product_definition
REFERENCE_TO_OBJECT_ BY_INFORMATION_ CONTENT	plant_functional_ information_content_ reference_assignment	221		plant_functional_information_content_reference_assignment <= plant_functional_information_content_description_assignment
REFERENCE_TO_OBJECT_ VIA_INFORMATION_ CARRIER	plant_functional_ information_carrier_ reference_assignment	221		plant_functional_information_carrier_reference_assignment <= plant_functional_information_carrier_description_assignment
TEXT #1: if text refers to a 'product_category' #2: if text refers to a 'product_definition_ relationship' #3: if text refers to a facility or a material	#1: (product_category. name) #2: (product_definition_ relationship.name) #3: (product_definition. id)	41 41 41		
content	IDENTICAL MAPPING			

Table 18 – Mapping table involvement_constraint UoF (uof12)

Application element	AIM element	Source	Rules	Reference path
RECOGNIZED_ INVOLVEMENT_FOR_ ACTIVITY_ACCORDING_ TO_CLASS #1: if recognized_ involvement_for_activity_ according_to_class is user_ defined #2: if recognized_ involvement_for_activity_ according_to_class is defined in this part of ISO 10303 #3: if recognized_ involvement_for_activity_ according_to_class is externally defined	#1: (involvement_in_ activity_class_constraint) #2: (standard_involvement_ in_activity_class_ constraint) #3: (externally_defined_ involvement_in_activity_ class_constraint)	221 221 221		#1: (involvement_in_activity_class_constraint <= group_relationship) #2: (standard_involvement_in_activity_class_constraint <= [involvement_in_activity_class_constraint <= group_relationship] [pre_defined_item]) #3: (externally_defined_involvement_in_activity_class_constraint <= [involvement_in_activity_class_constraint<= group_relationship] [externally_defined_item])
recognized_ involvement_for_ activity_according_ to_class to class_of_ activity (as activity)	PATH			involvement_in_activity_class_constraint <= group_relationship group_relationship.relating_group -> group => class_of_activity
recognized_ involvement_for_ activity_according_ to_class to class_of_ involvement (as involvement)	PATH			involvement_in_activity_class_constraint <= group_relationship group_relationship.related_group -> group => class_of_involvement

Table 18 (– Mapping table involvement_constraint UoF (uof12)) continued

Application element	AIM element	Source	Rules	Reference path
RECOGNIZED_ INVOLVEMENT_IN_ ACTIVITY_FOR_OBJECT_ ACCORDING_TO_CLASS #1: if recognized_ involvement_in_activity_for_ object_according_to_class is user_defined #2: if recognized_ involvement_in_activity_for_ object_according_to_class is defined in this part of ISO 10303 #3: if recognized_ involvement_in_activity_for_ object_according_to_class is externally defined	involvement_in_activity_ class_constraint_group	221		#1: (involvement_in_activity_class_constraint_group <= [involvement_in_activity_class_constraint] [group]) #2: (involvement_in_activity_class_constraint_group <= [standard_involvement_in_activity_class_constraint <= [involvement_in_activity_class_constraint <= group_relationship] [pre_defined_item]] [group]) #3: (involvement_in_activity_class_constraint_group <= [[externally_defined_involvement_in_activity_class_constraint <= [involvement_in_activity_class_constraint<= group_relationship] [externally_defined_item]] [group])
recognized_ involvement_in_ activity_for_object_ according_to_class to recognized_ involvement_for_ activity_according_ to_class (as role_in_ activity)	PATH			involvement_in_activity_class_constraint_group <= group <- group_relationship.related_group group_relationship => involvement_in_activity_class_constraint
recognized_ involvement_in_ activity_for_object_ according_to_class to class_of_facility (as player)	PATH			involvement_in_activity_class_constraint_group <= involvement_in_activity_class_constraint involvement_in_activity_class_constraint.items[i] involved_class_item involved_class_item = class_of_facility class_of_facility

Table 18 (– Mapping table involvement_constraint UoF (uof12)) continued

Application element	AIM element	Source	Rules	Reference path
recognized_ involvement_in_ activity_for_object_ according_to_class to class_of_material (as player)	PATH			involvement_in_activity_class_constraint_group <= involvement_in_activity_class_constraint involvement_in_activity_class_constraint.items[i] involved_class_item involved_class_item = class_of_material class_of_material
RECOGNIZED_OBJECT_ FOR_ROLE_ACCORDING_ TO_CLASS #1: if recognized_object_ for_role_according_to_class is user_defined #2: if recognized_object_ for_role_according_to_class is defined in this part of ISO 10303 #3: if recognized_object_ for_role_according_to_class is externally defined	plant_functional_ involvement_constraint_ assignment	221		#1: (plant_functional_involvement_constraint_assignment <= group_assignment) #2: (standard_plant_functional_involvement_constraint_assignment <= [plant_functional_involvement_constraint_assignment <= group_assignment] [pre_defined_item]) #3: (externally_defined_plant_functional_involvement_\ constraint_assignment <= [plant_functional_involvement_constraint_assignment <= group_assignment] [externally_defined_item])
recognized_object_ for_role_according_ to_class to class_of_ involvement (as involvement)	PATH			plant_functional_involvement_constraint_assignment <= group_assignment group_assignment.assigned_group -> group => class_of_involvement
recognized_object_ for_role_according_ to_class to class_of_ facility (as player)	PATH			plant_functional_involvement_constraint_assignment plant_functional_involvement_constraint_assignment.items[i] involved_class_item involved_class_item = class_of_facility class_of_facility

Table 18 (– Mapping table involvement_constraint UoF (uof12)) concluded

Application element	AIM element	Source	Rules	Reference path
recognized_object_ for_role_according_ to_class to class_of_ material (as player)	PATH			plant_functional_involvement_constraint_assignment plant_functional_involvement_constraint_assignment.items[i] involved_class_item involved_class_item = class_of_material class_of_material

Table 19 – Mapping table library_of_classes UoF (uof13)

Application element	AIM element	Source	Rules	Reference path
CLASSIFICATION_OF_ CLASS_OF_ANNOTATION_ ELEMENT #1: if classification_of_ class_of_annotation_element is user defined #2: if classification_of_ class_of_annotation_element is defined in this part of ISO 10303 #3: if classification_of_ class_of_annotation_element is externally defined	#1: (classification_of_ class_of_annotation_ element) #2: (standard_ classification_of_class_of_ annotation_element) #3: (externally_defined_ classification_of_class_of_ annotation_element)	221 221 221		#1: (classification_of_class_of_annotation_element <= group_relationship) #2: (standard_classification_of_class_of_annotation_element <= [classification_of_class_of_annotation_element <= group_relationship] [pre_defined_item]) #3: (externally_defined_classification_of_class_of_annotation_element <= [classification_of_class_of_annotation_element <= group_relationship] [externally_defined_item])
classification_of_ class_of_annotation_ element to class_of_ annotation_element (as classified)	PATH			classification_of_class_of_annotation_element <= group_relationship group_relationship.related_group -> group => class_of_annotation_element
classification_of_ class_of_annotation_ element to class_of_ annotation_element (as classifier)	PATH			classification_of_class_of_annotation_element <= group_relationship group_relationship.relating_group -> group => class_of_annotation_element

Table 19 (– Mapping table library_of_classes UoF (uof13)) continued

Application element	AIM element	Source	Rules	Reference path
CLASSIFICATION_OF_ CLASS_OF_FACILITY #1: if classification_of_ class_of_facility is user defined #2: if classification_of_ class_of_facility is defined in this part of ISO 10303 #3: if classification_of_ class_of_facility is externally defined	#1: (classification_of_ class_of_facility) #2: (standard_ classification_of_class_of_ facility) #3: (externally_defined_ classification_of_class_of_ facility)	221 221 221		#1: (classification_of_class_of_facility <= product_category_relationship) #2: (standard_classification_of_class_of_facility <= [classification_of_class_of_facility <= product_category_relationship] [pre_defined_item]) #3: (externally_defined_classification_of_class_of_facility <= [classification_of_class_of_facility <= product_category_relationship] [externally_defined_item])
classification_of_ class_of_facility to class_of_facility (as classified)	PATH			classification_of_class_of_facility => product_category_relationship => product_category_relationship.sub_category -> product_category => class_of_facility
classification_of_ class_of_facility to class_of_facility (as classifier)	PATH			classification_of_class_of_facility => product_category_relationship => product_category_relationship.category -> product_category => class_of_facility

Table 19 (– Mapping table library_of_classes UoF (uof13)) continued

Application element	AIM element	Source	Rules	Reference path
CLASSIFICATION_OF_ CLASS_OF_MATERIAL #1: if classification_of_ class_of_material is user defined #2: if classification_of_ class_of_material is defined in this part of ISO 10303 #3: if classification_of_ class_of_material is externally defined	#1: (classification_of_ class_of_material) #2: (standard_ classification_of_class_of_ material) #3: (externally_defined_ classification_of_class_of_ material)	221 221 221		#1: (classification_of_class_of_material <= product_category_relationship) #2: (standard_classification_of_class_of_material <= [classification_of_class_of_material <= product_category_relationship] [pre_defined_item]) #3: (externally_defined_classification_of_class_of_material <= [classification_of_class_of_material <= product_category_relationship] [externally_defined_item])
classification_of_ class_of_material to class_of_material (as classified)	PATH			classification_of_class_of_material <= product_category_relationship product_category_relationship.subcategory -> product_category => class_of_material
classification_of_ class_of_material to class_of_material (as classifier)	PATH			classification_of_class_of_material <= product_category_relationship product_category_relationship.category -> product_category => class_of_material
COLLECTION_OF_CLASS_ OF_ANNOTATION_ ELEMENT	plant_functional_class_of_ annotation_element_library_ assignment	221		{plant_functional_class_of_annotation_element_library_assignment <= library_assignment library_assignment.frame_of_reference -> library_context library_context.library_reference = 'class of annotation element library'}
collection_of_class_ of_annotation_ element to class_of_ annotation_element (as part)	PATH			plant_functional_class_of_annotation_element_library_assignment plant_functional_class_of_annotation_element_library_assignment.items[i] class_of_annotation_element_library_item class_of_annotation_element_library_item = class_of_annotation_element class_of_annotation_element

Table 19 (– Mapping table library_of_classes UoF (uof13)) continued

Application element	AIM element	Source	Rules	Reference path
collection_of_class_ of_annotation_ element to class_of_ annotation_element (as whole)	PATH			plant_functional_class_of_annotation_element_library_assignment <= library_assignment library_assignment.frame_of_reference -> library_context library_context_item = library_context library_context_item <- library_context_assignment.items[i] library_context_assignment <= group_assignment group_assignment.assigned_group -> group => class_of_annotation_element
COLLECTION_OF_CLASS_ OF_FACILITY	plant_functional_class_of_ facility_library_ assignment	221		{plant_functional_class_of_facility_library_assignment <= library_assignment library_assignment.frame_of_reference -> library_context library_context.library_reference = 'class of facility library'}
collection_of_class_ of_facility to class_ of_facility (as part)	PATH			plant_functional_class_of_facility_library_assignment plant_functional_class_of_facility_library_assignment.items[i] -> class_of_facility_library_item class_of_facility_library_item = class_of_facility class_of_facility
collection_of_class_ of_facility to class_ of_facility (as whole)	PATH			plant_functional_class_of_facility_library_assignment <= library_assignment library_assignment.frame_of_reference -> library_context <= application_context_element => product_context <- product.frame_of_reference product <- product_related_product_category.products[i] product_related_product_category <= product_category => class_of_facility

Table 19 (– Mapping table library_of_classes UoF (uof13)) continued

Application element	AIM element	Source	Rules	Reference path
COLLECTION_OF_CLASS_ OF_INFORMATION_ CONTENT	plant_functional_class_of_ information_content_ library_assignment	221		{plant_functional_class_of_information_content_library_assignment <= library_assignment library_assignment.frame_of_reference -> library_context library_context.library_reference = 'class of information content library'}
collection_of_class_ of_information_ content to class_of_ information_content (as part)	PATH			plant_functional_class_of_information_content_library_assignment plant_functional_class_of_information_content_library_assignment.items[i] -> class_of_information_content_library_item class_of_information_content_library_item = \ class_of_information_content class_of_information_content
collection_of_class_ of_information_ content to class_of_ information_content (as whole)	PATH			plant_functional_class_of_information_content_library_assignment <= library_assignment library_assignment.frame_of_reference -> library_context library_context_item = library_context library_context_item <- library_context_assignment.items[i] library_context_assignment <= group_assignment group_assignment.assigned_group -> group => class_of_information_content
COLLECTION_OF_CLASS_ OF_MATERIAL	plant_functional_class_of_ material_library_ assignment	221		{plant_functional_class_of_material_library_assignment <= library_assignment library_assignment.frame_of_reference -> library_context library_context.library_reference = 'class of material library'}
collection_of_class_ of_material to class_ of_material (as part)	PATH			plant_functional_class_of_material_library_assignment plant_functional_class_of_material_library_assignment.items[i] -> class_of_material_library_item class_of_material_library_item = class_of_material class_of_material

Table 19 (– Mapping table library_of_classes UoF (uof13)) continued

Application element	AIM element	Source	Rules	Reference path
collection_of_class_ of_material to class_ of_material (as whole)	PATH			plant_functional_class_of_material_library_assignment <= library_assignment library_assignment.frame_of_reference -> library_context <= application_context_element => product_context <- product.frame_of_reference product <- product_related_product_category.products[i] product_related_product_category <= product_category => class_of_material
COLLECTION_OF_CLASS_ OF_PROPERTY	plant_functional_class_of_ property_library_ assignment	221		{plant_functional_class_of_property_library_assignment <= library_assignment library_assignment.frame_of_reference -> library_context library_context.library_reference = 'class of property library'}
collection_of_class_ of_property to class_ of_property (as part)	PATH			plant_functional_class_of_property_library_assignment plant_functional_class_of_property_library_assignment.items[i] class_of_property_library_item class_of_property_library_item = class_of_property class_of_property
collection_of_class_ of_property to class_ of_property (as whole)	PATH			plant_functional_class_of_property_library_assignment <= library_assignment => library_assignment library_assignment.frame_of_reference -> library_context library_context_item = library_context library_context_item <- library_context_assignment.items[i] library_context_assignment <= group_assignment group_assignment.assigned_group -> group => class_of_property

Table 19 (– Mapping table library_of_classes UoF (uof13)) continued

Application element	AIM element	Source	Rules	Reference path
RECOGNIZED_ASSEMBLY_ OF_ANNOTATION_ ELEMENT_ACCORDING_TO_ CLASS #1: if assembly of annotation element is user defined #2: if assembly of annotation element is externally defined	#1: (class_of_annotation_ element_assembly_ constraint) #2: (externally_defined_ class_of_annotation_ element_assembly_ constraint)	221 221		#1: (class_of_annotation_element_assembly_constraint <= group_relationship) #2: (externally_defined_class_of_annotation_element_\ assembly_constraint <= [class_of_annotation_element_assembly_constraint <= group_relationship] [externally_defined_item])
recognized_assembly_ of_annotation_ element_according_to_ class to class_of_ annotation_element (as part)	PATH			class_of_annotation_element_assembly_constraint <= group_relationship group_relationship.related_group -> group => class_of_annotation_element
recognized_assembly_ of_annotation_ element_according_to_ class to class_of_ annotation_element (as whole)	PATH			class_of_annotation_element_assembly_constraint <= group_relationship group_relationship.relating_group -> group => class_of_annotation_element
RECOGNIZED_ASSEMBLY_ OF_FACILITY_ ACCORDING_TO_CLASS #1: if class_of_facility is user defined #2: if class_of_facility is externally defined	#1: (class_of_facility_ assembly_constraint) #2: (externally_defined_ class_of_facility_assembly_ constraint)	221 221		#1: (class_of_facility_assembly_constraint <= product_category_relationship) #2: (externally_defined_class_of_facility_assembly_constraint <= [class_of_facility_assembly_constraint <= product_category_relationship] [externally_defined_item])

Table 19 (– Mapping table library_of_classes UoF (uof13)) continued

Application element	AIM element	Source	Rules	Reference path
recognized_assembly_ of_facility_ according_to_class to class_of_facility (as part)	PATH			class_of_facility_assembly_constraint => product_category_relationship product_category_relationship.sub_category -> product_category => class_of_facility
recognized_assembly_ of_facility_ according_to_class to class_of_facility (as whole)	PATH			class_of_facility_assembly_constraint => product_category_relationship product_category_relationship.category -> product_category => class_of_facility
RECOGNIZED_ASSEMBLY_ OF_MATERIAL_ ACCORDING_TO_CLASS	#1: (class_of_material_ assembly_constraint)	221		#1: (class_of_material_assembly_constraint <= product_category_relationship)
	#2: (externally_defined_ class_of_material_assembly_ constraint)	221		#2: (externally_defined_class_of_material_assembly_constraint <= [class_of_material_assembly_constraint <= product_category_relationship] [externally_defined_item])
recognized_assembly_ of_material_ according_to_class to class_of_material (as part)	PATH			class_of_material_assembly_constraint => product_category_relationship product_category_relationship.sub_category -> product_category => class_of_material
recognized_assembly_ of_material_ according_to_class to class_of_material (as whole)	PATH			class_of_material_assembly_constraint => product_category_relationship product_category_relationship.category -> product_category => class_of_material
RECOGNIZED_ COMPOSITION_OF_ INFORMATION_CONTENT_ ACCORDING_TO_CLASS	class_of_information_ content_composition_ constraint	221		class_of_information_content_composition_constraint <= group_relationship

Table 19 (– Mapping table library_of_classes UoF (uof13)) continued

Application element	AIM element	Source	Rules	Reference path
recognized_ composition_of_ information_content_ according_to_class to class_of_ information_content (as part)	PATH			class_of_information_content_composition_constraint <= group_relationship group_relationship.related_group -> group => class_of_information_content
recognized_ composition_of_ information_content_ according_to_class to class_of_ information_content (as whole)	PATH			class_of_information_content_composition_constraint <= group_relationship group_relationship.relating_group -> group => class_of_information_content
RECOGNIZED_ CONNECTION_OF_ ANNOTATION_ELEMENT_ ACCORDING_TO_CLASS	class_of_annotation_ element_connection_ constraint	221		class_of_annotation_element_connection_constraint => group_relationship
recognized_ connection_of_ annotation_element_ according_to_class to class_of_ annotation_element (as side_1)	PATH			class_of_annotation_element_connection_constraint => group_relationship group_relationship.relating_group -> group => class_of_annotation_element
recognized_ connection_of_ annotation_element_ according_to_class to class_of_ annotation_element (as side_2)	PATH			class_of_annotation_element_connection_constraint => group_relationship group_relationship.related_group -> group => class_of_annotation_element

Table 19 (– Mapping table library_of_classes UoF (uof13)) continued

Application element	AIM element	Source	Rules	Reference path
RECOGNIZED_ CONNECTION_OF_ FACILITY_ACCORDING_ TO_CLASS #1: if class_of_facility is user defined #2: if class_of_facility is externally defined	#1: (class_of_facility_ connection_constraint) #2: (externally_defined_ class_of_facility_ connection_constraint)	221 221		#1: (class_of_facility_connection_constraint <= product_category_relationship) #2: (externally_defined_ class_of_facility_connection_constraint <= [class_of_facility_connection_constraint <= product_category_relationship] [externally_defined_item])
recognized_ connection_of_ facility_according_ to_class to class_of_ facility (as side_1)	PATH			class_of_facility_connection_constraint <= product_category_relationship product_category_relationship.category -> product_category => class_of_facility
recognized_ connection_of_ facility_according_ to_class to class_of_ facility (as side_2)	PATH			class_of_facility_connection_constraint <= product_category_relationship product_category_relationship.sub_category -> product_category => class_of_facility
RECOGNIZED_ CONNECTION_OF_ MATERIAL_ACCORDING_ TO_CLASS #1: if class_of_material is user defined #2: if class_of_material is externally defined	#1: (class_of_material_ connection_constraint) #2: (externally_defined_ class_of_material_ connection_constraint)	221 221		#1: (class_of_material_connection_constraint <= product_category_relationship) #2: (externally_defined_class_of_material_connection_constraint <= [class_of_material_connection_constraint <= product_category_relationship] [externally_defined_item]

Table 19 (– Mapping table library_of_classes UoF (uof13)) continued

Application element	AIM element	Source	Rules	Reference path
recognized_ connection_of_ material_according_ to_class to class_of_ material (as side_1)	PATH			class_of_material_connection_constraint <= product_category_relationship product_category_relationship.relating_product_category -> product_category => class_of_material
recognized_ connection_of_ material_according_ to_class to class_of_ material (as side_2)	PATH			class_of_material_connection_constraint <= product_category_relationship product_category_relationship.related_product_category -> product_category => class_of_material
RECOGNIZED_ DESCRIPTION_OF_ OBJECT_ACCORDING_TO_ CLASS	plant_functional_class_of_ object_description_ constraint_assignment	221		plant_functional_class_of_object_description_constraint_assignment <= group_assignment
recognized_ description_of_ object_according_to_ class to class_of_ information_content (as possessed)	PATH			plant_functional_class_of_object_description_constraint_assignment <= group_assignment group_assignment.assigned_group -> group => class_of_information_content
recognized_ description_of_ object_according_to_ class to described_ class_of_object (as described)	PATH			plant_functional_class_of_object_description_constraint_assignment plant_functional_class_of_object_description_\ constraint_assignment.items[i] -> described_item (described_item = class_of_activity class_of_activity) (described_item = class_of_facility class_of_facility) (described_item = class_of_material class_of_material)

Table 19 (– Mapping table library_of_classes UoF (uof13)) continued

Application element	AIM element	Source	Rules	Reference path
RECOGNIZED_ POSSESSION_OF_ PROPERTY_ACCORDING_ TO_CLASS	plant_functional_ recognized_possession_of_ property_assignment	221		plant_functional_recognized_possession_of_property_assignment <= group_assignment
recognized_ possession_of_ property_according_ to_class to class_of_ property (as possessed)	PATH			plant_functional_recognized_possession_of_property_assignment <= group_assignment group_assignment.assigned_group -> group => class_of_property
recognized_ possession_of_ property_according_ to_class to property_ possessing_class_ of_object (as possessor)	PATH			plant_functional_recognized_possession_of_property_assignment plant_functional_recognized_possession_of_property_assignment.items[i] -> possessed_class_of_property_item
RECOGNIZED_ PRESENTATION_OF_ FACILITY_BY_ ANNOTATION_ELEMENT_ ACCORDING_TO_CLASS	class_of_annotation_ element_presentation_of_ facility_constraint_ assignment	221		class_of_annotation_element_presentation_of_facility_\ constraint_assignment <= group_assignment
recognized_ presentation_of_ facility_by_ annotation_element_ according_to_class to class_of_ annotation_element (as presenter)	PATH			class_of_annotation_element_presentation_of_facility_\ constraint_assignment <= group_assignment group_assignment.assigned_group -> group => class_of_annotation_element

Table 19 (– Mapping table library_of_classes UoF (uof13)) continued

Application element	AIM element	Source	Rules	Reference path
recognized_ presentation_of_ facility_by_ annotation_element_ according_to_class to class_of_facility (as presented)	PATH			class_of_annotation_element_presentation_of_facility_\ constraint_assignment class_of_annotation_element_presentation_of_facility_\ constraint_assignment.items[i] -> presented_facility_class_item presented_facility_class_item = class_of_facility class_of_facility
RECOGNIZED_ PRESENTATION_OF_ MATERIAL_BY_ ANNOTATION_ELEMENT_ ACCORDING_TO_CLASS	class_of_annotation_ element_presentation_of_ material_constraint_ assignment	221		class_of_annotation_element_presentation_of_material_\ constraint_assignment <= group_assignment
recognized_ presentation_of_ material_by_ annotation_element_ according_to_class to class_of_ annotation_element (as presenter)	PATH			class_of_annotation_element_presentation_of_material_\ constraint_assignment <= group_assignment group_assignment.assigned_group -> group => class_of_annotation_element
recognized_ presentation_of_ material_by_ annotation_element_ according_to_class to class_of_material (as presented)	PATH			class_of_annotation_element_presentation_of_material_\ constraint_assignment class_of_annotation_element_presentation_of_material_\ constraint_assignment.items[i] -> presented_material_class_item presented_material_class_item = class_of_material class_of_material

Table 19 (– Mapping table library_of_classes UoF (uof13)) concluded

Application element	AIM element	Source	Rules	Reference path
RECOGNIZED_PROVISION_OF_SERVICE_ACCORDING_TO_CLASS #1: if provision_of_service_by_material is user defined #2: if provision_of_service_by_material is externally defined	#1: (recognized_provision_of_service_according_to_class) #2: (externally_defined_recognized_provision_of_service_according_to_class)	221 221		#1: (recognized_provision_of_service_according_to_class <= product_category_relationship) #2: (externally_defined_recognized_provision_of_service_\ according_to_class <= [recognized_provision_of_service_according_to_class <= product_category_relationship] [externally_defined_item])
recognized_provision_of_service_according_to_class to class_of_facility (as service)	PATH			recognized_provision_of_service_according_to_class <= product_category_relationship product_category_relationship.sub_category ->> product_category => class_of_facility
recognized_provision_of_service_according_to_class to class_of_material (as resource)	PATH			recognized_provision_of_service_according_to_class <= product_category_relationship product_category_relationship.category ->> product_category => class_of_material

Table 20 – Mapping table life_cycle UoF (uof14)

Application element	AIM element	Source	Rules	Reference path
ACTUAL_OBJECT #1: if actual_object is a specific activity #2: if actual_object is a typical activity	(action.name) (action_method.name)	41 41		#1: (action {action.name = 'actual'}) #2: (action_method {action_method.name = 'actual'})
#2: if actual_object is an approval_of_object	approval_role.description	41		{plant_functional_approval_assignment <= approval_assignment approval_assignment.role ->> approval_role approval_role.description = 'actual'}
#3: if actual_object is a beginning_or_end_effect	effectivity.description	41		{effectivity.description = 'actual'}
#4: if actual_object is a composition_of_activity	(action.description) (action_method.description)	41		(action_composition <= action {action.description = 'actual'}) (action_method_composition <= action_method {action_method.description = 'actual'})
#5: if actual_object is a composition_of_facility	product_definition.description	41		(assembly_of_facility <=) (collection_of_facility <=) product_definition {product_definition.description = 'actual'}
#6: if actual_object is a composition_of_material	product_definition.description	41		(assembly_of_material <=) (collection_of_material <=) product_definition {product_definition.description = 'actual'}
#7: if actual_object is a connection_of_facility	product_definition.description	41		connection_of_facility <= product_definition {product_definition.description = 'actual'}

Table 20 (– Mapping table life_cycle UoF (uof14)) continued

Application element	AIM element	Source	Rules	Reference path
#8: if actual_ object is a connection_of_ material	product_definition. description	41		connection_of_material <= product_definition {product_definition.description = 'actual'}
#9: if actual_ object is a facility	product_definition_context. life_cycle_stage	41		{product_definition product_definition.frame_of_reference -> product_definition_context product_definition_context.life_cycle_stage = 'actual' }
#10: if actual_ object is a feature	shape_aspect.description	41		{shape_aspect shape_aspect.description = 'actual' }
#11: if actual_ object is an involvement_of_ object_in_activity	action_role.description	41		(plant_functional_activity_performer_assignment <=) (plant_functional_assessed_object_activity_assignment <=) (plant_functional_assessment_purpose_activity_assignment <=) (plant_functional_assessment_result_activity_assignment <=) (plant_functional_design_reference_activity_assignment <=) (plant_functional_design_result_activity_assignment <=) (plant_functional_transfer_material_destination_activity_assignment <=) (plant_functional_transfer_material_source_activity_assignment <=) (plant_functional_transferred_material_activity_assignment <=) (plant_functional_transform_material_input_activity_assignment <=) (plant_functional_transform_material_output_activity_assignment <=) action_assignment {action_assignment.role -> action_role action_role.description = 'actual'} {action_assignment.assigned_action -> (action) (action action.chosen_method -> action_method)}
#12: if actual_ object is a material	product_definition_context. life_cycle_stage	41		{product_definition product_definition.frame_of_reference -> product_definition_context product_definition_context.life_cycle_stage = 'actual'}

Table 20 (– Mapping table life_cycle UoF (uof14)) continued

Application element	AIM element	Source	Rules	Reference path
#13: if actual_ object is an orientation_of_ material	shape_aspect.description	41		orientation_of_material <= shape_aspect {shape_aspect.description = 'actual'}
#14: if actual_ object is an orientation_of_ resource_for_ facility	shape_aspect.description	41		orientation_of_resource_for_facility <= shape_aspect {shape_aspect.description = 'actual'}
#15: if actual_ object is a point_in_ space_of_material	shape_aspect.description	41		point_in_space_of_material <= shape_aspect {shape_aspect.description = 'actual'}
#16: if actual_ object is a point_in_ space_of_resource_ for_facility	shape_aspect.description	41		point_in_space_of_resource_for_facility <= shape_aspect {shape_aspect.description = 'actual'}
#17: if actual_ object is a possession_of_ connector_by_ facility	product_definition. description	41		possession_of_facility_port <= product_definition {product_definition.description = 'actual'}
#18: if actual_ object is a possession_of_ feature_by_material	property_definition. description	41		{product_definition_shape <= property_definition property_definition.description = 'actual'}
#19: if actual_ object is a possession_of_ property_by_each_ member_of_collection	property_definition. description	41		{property_definition property_definition.description = 'actual' }
#20: if actual_ object is a possession_of_ property_by_object	property_definition. description	41		{property_definition property_definition.description = 'actual' }

Table 20 (– Mapping table life_cycle UoF (uof14)) continued

Application element	AIM element	Source	Rules	Reference path
#21: if actual_ object is a provision_of_service_ by_material	product_definition. description	41		{provision_of_service <= product_definition product_definition.description = 'actual'}
#22: if actual_ object is a temporal_ sequence_of_activity	(action.description) (action_method. description)	41 41		(action_sequence <= action {action.description = 'actual'}) (action_method_sequence <= action_method {action_method.description = 'actual'})
#23: if actual_ object is a topologic_sequence_ of_facility	product_definition. description	41		topological_sequence_of_facility <= product_definition {product_definition.description = 'actual')}
#24: if actual_ object is a usage_of_ facility_in_ connection	product_definition. description	41		usage_of_facility_in_connection <= product_definition {product_definition.description = 'actual'}
#25: if actual_ object is a usage_of_ feature_in_ connection_of_ material	shape_aspect.description	41		usage_of_feature_in_connection <= shape_aspect {shape_aspect.description = 'actual'}
#26: if actual_ object is a usage_of_ material_in_ connection	product_definition. description	41		usage_of_material_in_connection <= product_definition {product_definition.description = 'actual'}
INTENDED_OBJECT #1: if intended_object is a specific activity #2: if intended_object is a typical object	(action.name) (action_method.name)	41 41		#1: (action {action.name = 'intended'}) #2: (action_method {action_method.name = 'intended'})
#2: if intended_ object is an approval_of_object	approval_role.description	41		plant_functional_approval_assignment <= approval_assignment {approval_assignment.role -> approval_role

Table 20 (– Mapping table life_cycle UoF (uof14)) continued

Application element	AIM element	Source	Rules	Reference path
				approval_role.description = 'intended'}
#3: if intended_ object is a beginning_or_end_ effect	effectivity.description	41		{effectivity.description = 'intended'}
#4: if intended_ object is a composition_of_ activity	(action.description) (action_method. description)	41		(action_composition <= action {action.description = 'intended'}) (action_method_composition <= action_method {action_method.description = 'intended'})
#5: if intended_ object is a composition_of_ facility	product_definition. description	41		(assembly_of_facility <=) (collection_of_facility <=) product_definition {product_definition.description = 'intended'}
#6: if intended_ object is a composition_of_ material	product_definition. description	41		(assembly_of_material <=) (collection_of_material <=) product_definition {product_definition.description = 'intended'}
#7: if intended_ object is a connection_of_ facility	product_definition. description	41		connection_of_facility <= product_definition {product_definition.description = 'intended'}
#8: if intended_ object is a connection_of_ material	product_definition_ relationship.description	41		connection_of_material <= product_definition {product_definition.description = 'intended'}
#9: if intended_ object is a facility	product_definition_context. life_cycle_stage	41		{product_definition product_definition.frame_of_reference -> product_definition_context product_definition_context.life_cycle_stage = 'intended' }
#10: if intended_ object is a feature	shape_aspect.description	41		{shape_aspect shape_aspect.description = 'intended' }

Table 20 (– Mapping table life_cycle UoF (uof14)) continued

Application element	AIM element	Source	Rules	Reference path
#11: if intended_ object is an involvement_of_ object_in_activity	action_role.description	41		(plant_functional_activity_performer_assignment <=) (plant_functional_assessed_object_activity_assignment <=) (plant_functional_assessment_purpose_activity_assignment <=) (plant_functional_assessment_result_activity_assignment <=) (plant_functional_design_reference_activity_assignment <=) (plant_functional_design_result_activity_assignment <=) (plant_functional_transfer_material_destination_activity_assignment <=) (plant_functional_transfer_material_source_activity_assignment <=) (plant_functional_transferred_material_activity_assignment <=) (plant_functional_transform_material_input_activity_assignment <=) (plant_functional_transform_material_output_activity_assignment <=) action_assignment {action_assignment.role -> action_role action_role.description = 'intended'} {action_assignment.assigned_action -> (action) (action action.chosen_method -> action_method)}
#12: if intended_ object is a material	product_definition_context. life_cycle_stage	41		{product_definition product_definition.frame_of_reference -> product_definition_context product_definition_context.life_cycle_stage = 'intended'}
#13: if intended_ object is an orientation_of_ material	shape_aspect.description	41		orientation_of_material <= shape_aspect {shape_aspect.description = 'intended'}
#14: if intended_ object is an orientation_of_ resource_for_ facility	shape_aspect.description	41		orientation_of_resource_for_facility <= shape_aspect {shape_aspect.description = 'intended'}

Table 20 (– Mapping table life_cycle UoF (uof14)) continued

Application element	AIM element	Source	Rules	Reference path
#15: if intended_ object is a point_in_ space_of_material	shape_aspect_relationship. description	41		point_in_space_of_material <= shape_aspect {shape_aspect.description = 'intended'}
#16: if intended_ object is a point_in_ space_of_resource_ for_facility	shape_aspect.description	41		point_in_space_of_resource_for_facility <= shape_aspect {shape_aspect.description = 'intended'}
#17: if intended_ object is a possession_of_ connector_by_ facility	product_definition. description	41		possession_of_facility_port <= product_definition product_definition.description = 'intended'}
#18: if intended_ object is a possession_of_ feature_by_material	property_definition. description	41		{product_definition_shape <= property_definition property_definition.description = 'intended'}
#19: if intended_ object is a possession_of_ property_by_each_ member_of_collection	property_definition. description	41		{property_definition property_definition.description = 'intended' }
#20: if intended_ object is a possession_of_ property_by_object	property_definition. description	41		{property_definition property_definition.description = 'intended' }
#21: if intended_ object is a provision_of_service_ by_material	product_definition. description	41		{provision_of_service <= product_definition product_definition.description = 'intended'}
#22: if intended_ object is a temporal_ sequence_of_activity	(action.description) (action_method. description)	41 41		(action_sequence <= action {action.description = 'intended'}) (action_method_sequence <= action_method {action_method.description = 'intended'})

Table 20 (– Mapping table life_cycle UoF (uof14)) continued

Application element	AIM element	Source	Rules	Reference path
#23: if intended_ object is a topologic_sequence_ of_facility	product_definition. description	41		topological_sequence_of_facility <= product_definition {product_definition.description = 'actual')}
#24: if intended_ object is a usage_of_ facility_in_ connection	product_definition. description	41		usage_of_facility_in_connection <= product_definition {product_definition.description = 'intended'}
#25: if intended_ object is a usage_of_ feature_in_ connection_of_ material	shape_aspect.description	41		usage_of_feature_in_connection <= shape_aspect {shape_aspect.description = 'intended'}
#26: if intended_ object is a usage_of_ material_in_ connection	#26: (product_definition. description)	41		usage_of_material_in_connection <= product_definition {product_definition.description = 'intended'}
LIFE_CYCLE_OBJECT	IDENTICAL MAPPING			
REALIZATION_OF_ INTENDED_OBJECT_BY_ ACTUAL #1: if realization_of_ intended_object_by_actual relates two activity objects	realization_of_intended_ activity_by_actual	221		realization_of_intended_activity_by_actual <= action_relationship {action_relationship.name = 'realization'}
#1: realization_of_ intended_object_by_ actual to activity (as actual) if activity is a specific activity if activity is a typical activity	PATH			realization_of_intended_activity_by_actual <= action_relationship action_relationship.relating_action -> (action {action.name = 'actual'}) (action action.chosen_method -> action_method {action_method.name = 'actual'})

Table 20 (– Mapping table life_cycle UoF (uof14)) continued

Application element	AIM element	Source	Rules	Reference path
#1: realization_of_ intended_object_by_ actual to activity (as intended) if activity is a specific activity if activity is a typical activity	PATH			realization_of_intended_activity_by_actual <= action_relationship action_relationship.relating_action -> (action {action.name = 'intended'}) (action action.chosen_method -> action_method {action_method.name = 'intended'})
#2: if realization_ of_intended_object_ by_actual relates two approval_of_ objects	approval_relationship	41		{approval_relationship.name = 'realization'}
#2: realization_of_ intended_object_by_ actual to approval_ of_object (as actual)	PATH			approval_relationship approval_relationship.related_approval -> approval {approval <- approval_assignment.assigned_approval approval_assignment approval_assignment.role -> approval_role.description = 'actual'}
#2: realization_of_ intended_object_by_ actual to approval_ of_object (as intended)	PATH			approval_relationship approval_relationship.relating_approval -> approval {approval <- approval_assignment.assigned_approval approval_assignment approval_assignment.role -> approval_role.description = 'intended'}

Table 20 (– Mapping table life_cycle UoF (uof14)) continued

Application element	AIM element	Source	Rules	Reference path
#3: if realization_ of_intended_object_ by_actual relates two beginning_or_end_ effects	effectivity_relationship	41		{effectivity_relationship.name = 'realization'}
#3: realization_of_ intended_object_by_ actual to beginning_ or_end_effect (as actual)	PATH			effectivity_relationship {effectivity_relationship.related_effectivity -> effectivity effectivity.description = 'actual'}
#3: realization_of_ intended_object_by_ actual to beginning_ or_end_effect (as intended)	PATH			effectivity_relationship {effectivity_relationship.relating_effectivity -> effectivity effectivity.description = 'intended'}
#4: if realization_ of_intended_object_ by_actual relates two composition_of_ activity objects	(action_relationship) (action_method_ relationship)	41 41		{action_relationship.name = 'realization'}
#4: realization_of_ intended_object_by_ actual to composition_of_ activity (as actual)	PATH			(action_relationship {action_relationship.related_action -> action => {action.description = 'actual'} action_composition}) (action_method_relationship {action_method_relationship.related_action_method -> action_method => {action_method.description = 'actual'} action_method_composition})

Table 20 (– Mapping table life_cycle UoF (uof14)) continued

Application element	AIM element	Source	Rules	Reference path
#4: realization_of_ intended_object_by_ actual to composition_of_ activity (as intended)	PATH			(action_relationship {action_relationship.relating_action -> action => {action.description = 'intended'} action_composition}) (action_method_relationship {action_method_relationship.relating_action_method -> action_method => {action_method.description = 'intended'} action_method_composition})
#5: if realization_ of_intended_object_ by_actual relates two composition_of_ facility objects	product_definition_ relationship	41		{product_definition_relationship.name = 'realization'}
#5: realization_of_ intended_object_by_ actual to composition_of_ facility (as actual)	PATH			product_definition_relationship {product_definition_relationship.related_product_definition -> product_definition => {product_definition.description = 'actual'} (assembly_of_facility) (collection_of_facility)}
#5: realization_of_ intended_object_by_ actual to composition_of_ facility (as intended)	PATH			product_definition_relationship {product_definition_relationship.relating_product_definition -> product_definition => {product_definition.description = 'intended'} (assembly_of_facility) (collection_of_facility)}
#6: if realization_ of_intended_object_ by_actual relates two composition_of_ material objects	product_definition_ relationship	41		{product_definition_relationship.name = 'realization'}

Table 20 (– Mapping table life_cycle UoF (uof14)) continued

Application element	AIM element	Source	Rules	Reference path
#6: realization_of_ intended_object_by_ actual to composition_of_ material (as actual)	PATH			product_definition_relationship {product_definition_relationship.related_product_definition -> product_definition => {product_definition.description = 'actual'} (assembly_of_material) (collection_of_material)}
#6: realization_of_ intended_object_by_ actual to composition_of_ material (as intended)	PATH			product_definition_relationship {product_definition_relationship.relating_product_definition -> product_definition => {product_definition.description = 'intended'} (assembly_of_material) (collection_of_material)}
#7: if realization_ of_intended_object_ by_actual relates two connection_of_ facility objects	product_definition_ relationship	41		{product_definition_relationship.name = 'realization'}
#7: realization_of_ intended_object_by_ actual to connection_ of_facility (as actual)	PATH			product_definition_relationship {product_definition_relationship.related_product_definition_relationship -> product_definition => {product_definition.description = 'actual'} connection_of_facility}
#7: realization_of_ intended_object_by_ actual to connection_ of_facility (as intended)	PATH			product_definition_relationship {product_definition_relationship.relating_product_definition -> product_definition => {product_definition.description = 'intended'} connection_of_facility}
#8: if realization_ of_intended_object_ by_actual relates two connection_of_ material objects	product_definition_ relationship	41		{product_definition_relationship.name = 'realization'}

Table 20 (– Mapping table life_cycle UoF (uof14)) continued

Application element	AIM element	Source	Rules	Reference path
#8: realization_of_ intended_object_by_ actual to connection_ of_material (as actual)	PATH			product_definition_relationship {product_definition_relationship.related_product_definition -> product_definition => {product_definition.description = 'actual'} connection_of_material}
#8: realization_of_ intended_object_by_ actual to connection_ of_material (as intended)	PATH			product_definition_relationship {product_definition_relationship.relating_product_definition -> product_definition => {product_definition.description = 'intended'} connection_of_material}
#9: if realization_ of_intended_object_ by_actual relates two facility objects	realization_of_intended_ facility_or_material_by_ actual	221		realization_of_intended_facility_or_material_by_actual <= product_definition_relationship {product_definition_relationship.name = 'realization'}
#9: realization_of_ intended_object_by_ actual to facility (as actual)	PATH			realization_of_intended_facility_or_material_by_actual <= product_definition_relationship product_definition_relationship.related_product_definition -> product_definition product_definition.frame_of_reference -> product_definition_context <= application_context_element {application_context_element.life_cycle_stage = 'actual'}
#9: realization_of_ intended_object_by_ actual to facility (as intended)	PATH			realization_of_intended_facility_or_material_by_actual <= product_definition_relationship product_definition_relationship.relating_product_definition -> product_definition product_definition.frame_of_reference -> product_definition_context <= application_context_element {application_context_element.life_cycle_stage = 'intended'}
#10: if realization_ of_intended_object_ by_actual relates two feature objects	shape_aspect_relationship	41		{shape_aspect_relationship.name = 'realization'}

Table 20 (– Mapping table life_cycle UoF (uof14)) continued

Application element	AIM element	Source	Rules	Reference path
#10: realization_of_ intended_object_by_ actual to feature (as actual)	PATH			shape_aspect_relationship {shape_aspect_relationship.related_shape_aspect -> shape_aspect shape_aspect.description = 'actual'}
#10: realization_of_ intended_object_by_ actual to feature (as intended)	PATH			shape_aspect_relationship {shape_aspect_relationship.relating_shape_aspect -> shape_aspect shape_aspect.description = 'intended'}
#11: if realization_ of_intended_object_ by_actual relates two involvement_of_ object_in_activity objects	(action_relationship) (action_method_ relationship)	41 41		({action_relationship.name = 'realization'}) ({action_method_relationship.name = 'realization'})
#11: realization_of_ intended_object_by_ actual to involvement_of_ object_in_activity (as actual)	PATH			(action_relationship action_relationship.related_action ->) (action_method_relationship action_method_relationship.related_action_method -> action_method <- action.chosen_method) action {action <- action_assignment.assigned_action action_assignment {action assignment => (plant_functional_activity_performer_assignment) (plant_functional_assessed_object_activity_assignment) (plant_functional_assessment_purpose_activity_assignment) (plant_functional_assessment_result_activity_assignment) (plant_functional_design_reference_activity_assignment) (plant_functional_design_result_activity_assignment) (plant_functional_transfer_material_destination_activity_assignment) (plant_functional_transfer_material_source_activity_assignment) (plant_functional_transferred_material_activity_assignment) (plant_functional_transform_material_input_activity_assignment) (plant_functional_transform_material_output_activity_assignment)}

Table 20 (– Mapping table life_cycle UoF (uof14)) continued

Application element	AIM element	Source	Rules	Reference path
				action_assignment.role -> action_role.description = 'actual'}
#11: realization_of_ intended_object_by_ actual to involvement_of_ object_in_activity (as intended)	PATH			(action_relationship action_relationship.related_action ->) (action_method_relationship action_method_relationship.related_action_method -> action_method <- action.chosen_method) action {action <- action_assignment.assigned_action action_assignment {action assignment => (plant_functional_activity_performer_assignment) (plant_functional_assessed_object_activity_assignment) (plant_functional_assessment_purpose_activity_assignment) (plant_functional_assessment_result_activity_assignment) (plant_functional_design_reference_activity_assignment) (plant_functional_design_result_activity_assignment) (plant_functional_transfer_material_destination_activity_assignment) (plant_functional_transfer_material_source_activity_assignment) (plant_functional_transferred_material_activity_assignment) (plant_functional_transform_material_input_activity_assignment) (plant_functional_transform_material_output_activity_assignment)} action_assignment.role -> action_role.description = 'intended'}
#12: if realization_ of_intended_object_ by_actual relates two material objects	realization_of_intended_ facility_or_material_by_ actual	221		realization_of_intended_facility_or_material_by_actual <= product_definition_relationship {product_definition_relationship.name = 'realization'}
#12: realization_of_ intended_object_by_ actual to material (as actual)	PATH			realization_of_intended_facility_or_material_by_actual <= product_definition_relationship product_definition_relationship.related_product_definition -> product_definition product_definition.frame_of_reference ->

Table 20 (– Mapping table life_cycle UoF (uof14)) continued

Application element	AIM element	Source	Rules	Reference path
				product_definition_context <= application_context_element {application_context_element.life_cycle_stage = 'actual'}
#12: realization_of_ intended_object_by_ actual to material (as intended)	PATH			realization_of_intended_facility_or_material_by_actual <= product_definition_relationship product_definition_relationship.relating_product_definition -> product_definition product_definition.frame_of_reference -> product_definition_context <= application_context_element {application_context_element.life_cycle_stage = 'intended'}
#13: if realization_ of_intended_object_ by_actual relates two orientation_of_ material objects	shape_aspect_relationship	41		{shape_aspect_relationship.name = 'realization'}
#13: realization_of_ intended_object_by_ actual to orientation_of_ material (as actual)	PATH			shape_aspect_relationship {shape_aspect_relationship.related_shape_aspect -> shape_aspect {=> orientation_of_material} shape_aspect.description = 'actual'}
#13: realization_of_ intended_object_by_ actual to orientation_of_ material (as intended)	PATH			shape_aspect_relationship {shape_aspect_relationship.relating_shape_aspect -> shape_aspect {=> orientation_of_material} shape_aspect.description = 'intended'}
#14: if realization_ of_intended_object_ by_actual relates two orientation_of_ resource_for_ facility objects	shape_aspect_relationship	41		{shape_aspect_relationship.name = 'realization'}

Table 20 (– Mapping table life_cycle UoF (uof14)) continued

Application element	AIM element	Source	Rules	Reference path
#14: realization_of_ intended_object_by_ actual to orientation_of_ resource_for_ facility (as actual)	PATH			shape_aspect_relationship {shape_aspect_relationship.related_shape_aspect -> shape_aspect {=> orientation_of_resource_for_facility} shape_aspect.description = 'actual'}
#14: realization_of_ intended_object_by_ actual to orientation_of_ resource_for_ facility (as intended)	PATH			shape_aspect_relationship {shape_aspect_relationship.relating_shape_aspect -> shape_aspect {=> orientation_of_resource_for_facility} shape_aspect.description = 'intended'}
#15: if realization_ of_intended_object_ by_actual relates two point_in_space_ of_material objects	shape_aspect_relationship	41		{shape_aspect_relationship.name = 'realization'}
#15: realization_of_ intended_object_by_ actual to point_in_ space_of_material (as actual)	PATH			shape_aspect_relationship {shape_aspect_relationship.related_shape_aspect -> shape_aspect {=> point_in_space_of_material} shape_aspect.description = 'actual'}
#15: realization_of_ intended_object_by_ actual to point_in_ space_of_material (as intended)	PATH			shape_aspect_relationship {shape_aspect_relationship.relating_shape_aspect -> shape_aspect {=> point_in_space_of_material} shape_aspect.description = 'intended'}
#16: if realization_ of_intended_object_ by_actual relates two point_in_space_ of_resource_for_ facility objects	shape_aspect_relationship	41		{shape_aspect_relationship.name = 'realization'}

Table 20 (– Mapping table life_cycle UoF (uof14)) continued

Application element	AIM element	Source	Rules	Reference path
#16: realization_of_ intended_object_by_ actual to point_in_ space_of_resource_ for_facility (as actual)	PATH			shape_aspect_relationship {shape_aspect_relationship.related_shape_aspect -> shape_aspect {=> point_in_space_of_resource_for_facility} shape_aspect.description = 'actual'}
#16: realization_of_ intended_object_by_ actual to point_in_ space_of_resource_ for_facility (as intended)	PATH			shape_aspect_relationship {shape_aspect_relationship.relating_shape_aspect -> shape_aspect {=> point_in_space_of_resource_for_facility} shape_aspect.description = 'intended'}
#17: if realization_ of_intended_object_ by_actual relates two possession_of_ connector_by_ facility objects	product_definition_ relationship	41		{product_definition_relationship.name = 'realization'}
#17: realization_of_ intended_object_by_ actual to possession_ of_connector_by_ facility (as actual)	PATH			product_definition_relationship {product_definition_relationship.related_product_definition -> product_definition => {product_definition.description = 'actual'} possession_of_facility_port}
#17: realization_of_ intended_object_by_ actual to possession_ of_connector_by_ facility (as intended)	PATH			product_definition_relationship {product_definition_relationship.relating_product_definition -> product_definition => {product_definition.description = 'intended'} possession_of_facility_port}

Table 20 (– Mapping table life_cycle UoF (uof14)) continued

Application element	AIM element	Source	Rules	Reference path
#18: if realization_ of_intended_object_ by_actual relates two possession_of_ feature_by_material objects	property_definition_ relationship	45		{property_definition_relationship.name = 'realization'}
#18: realization_of_ intended_object_by_ actual to possession_ of_feature_by_ material (as actual)	PATH			property_definition_relationship {property_definition_relationship.related_property_definition -> property_definition => {property_definition.description = 'actual'} property_definition_shape}
#18: realization_of_ intended_object_by_ actual to possession_ of_feature_by_ material (as intended)	PATH			property_definition_relationship {property_definition_relationship.relating_property_definition -> property_definition => {property_definition.description = 'intended'} property_definition_shape}
#19: if realization_ of_intended_object_ by_actual relates two possession_of_ property_by_each_ member_of_collection objects	property_definition_ relationship	45		{property_definition_relationship.name = 'realization'}
#19: realization_of_ intended_object_by_ actual to possession_ of_property_by_each_ member_of_collection (as actual)	PATH			property_definition_relationship {property_definition_relationship.related_property_definition -> property_definition property_definition.description = 'actual'}

Table 20 (– Mapping table life_cycle UoF (uof14)) continued

Application element	AIM element	Source	Rules	Reference path
#19: realization_of_ intended_object_by_ actual to possession_ of_property_by_each_ member_of_collection (as intended)	PATH			property_definition_relationship {property_definition_relationship.relating_property_definition -> property_definition property_definition.description = 'intended'}
#20: if realization_ of_intended_object_ by_actual relates two possession_of_ property_by_objects	(property_definition_ relationship) (action_property_ relationship)	45 49		({property_definition_relationship.name = 'realization'}) ({action_property_relationship.name = 'realization'})
#20: realization_of_ intended_object_by_ actual to possession_ of_property_by_ objects (as actual)	PATH			(property_definition_relationship {property_definition_relationship.related_property_definition -> property_definition => property_definition.description = 'actual'}) (action_property_relationship action_property_relationship.related_action_property -> action_property action_property.description = 'actual'})
#20: realization_of_ intended_object_by_ actual to possession_ of_property_by_ objects (as intended)	PATH			(property_definition_relationship {property_definition_relationship.relating_property_definition -> property_definition => property_definition.description = 'intended'}) (action_property_relationship action_property_relationship.relating_action_property -> action_property {action_property.description = 'intended'})
#21: if realization_ of_intended_object_ by_actual relates two provision_of_ service_by_material objects	product_definition_ relationship	41		{product_definition_relationship.name = 'realization'}

Table 20 (– Mapping table life_cycle UoF (uof14)) continued

Application element	AIM element	Source	Rules	Reference path
#21: realization_of_ intended_object_by_ actual to provision_ of_service_by_ material (as actual)	PATH			product_definition_relationship {product_definition_relationship.related_product_definition -> product_definition => {product_definition.description = 'actual'} provision_of_service}
#21: realization_of_ intended_object_by_ actual to provision_ of_service_by_ material (as intended)	PATH			product_definition_relationship {product_definition_relationship.relating_product_definition -> product_definition => {product_definition.description = 'intended'} provision_of_service}
#22: if realization_ of_intended_object_ by_actual relates two temporal_ sequence_of_activity objects	(action_relationship) (action_method_ relationship)	41 41		({action_relationship.name = 'realization'}) ({action_method_relationship.name = 'realization'})
#22: realization_of_ intended_object_by_ actual to temporal_ sequence_of_activity (as actual)	PATH			(action_relationship {action_relationship.related_action -> action => {action.description = 'actual'} action_sequence) (action_method_relationship {action_method_relationship.related_action_method -> action_method => {action_method.description = 'actual'} action_method_sequence)
#22: realization_of_ intended_object_by_ actual to temporal_ sequence_of_activity (as intended)	PATH			(action_relationship {action_relationship.relating_action -> action => {action.description = 'intended'} action_sequence) (action_method_relationship {action_method_relationship.relating_action_method -> action_method =>

Table 20 (– Mapping table life_cycle UoF (uof14)) continued

Application element	AIM element	Source	Rules	Reference path
				{action_method.description = 'intended'} action_method_sequence)
#23: if realization_ of_intended_object_ by_actual relates two topologic_ sequence_of_facility objects	product_definition_ relationship	41		{product_definition_relationship.name = 'realization'}
#23: realization_of_ intended_object_by_ actual to topologic_ sequence_of_facility (as actual)	PATH			product_definition_relationship product_definition_relationship.related_product_definition -> product_definition => {product_definition.description = 'actual'} topological_sequence_of_facility
#23: realization_of_ intended_object_by_ actual to topologic_ sequence_of_facility (as intended)	PATH			product_definition_relationship product_definition_relationship.related_product_definition -> product_definition => {product_definition.description = 'intended'} topological_sequence_of_facility
#24: if realization_ of_intended_object_ by_actual relates two usage_of_ facility_in_ connection objects	product_definition_ relationship	41		{product_definition_relationship.name = 'realization'}
#24: realization_of_ intended_object_by_ actual to usage_of_ facility_in_ connection (as actual)	PATH			product_definition_relationship product_definition_relationship.related_product_definition -> product_definition => {product_definition.description = 'actual'} usage_of_facility_in_connection

Table 20 (– Mapping table life_cycle UoF (uof14)) continued

Application element	AIM element	Source	Rules	Reference path
#24: realization_of_ intended_object_by_ actual to usage_of_ facility_in_ connection (as intended)	PATH			product_definition_relationship product_definition_relationship.relating_product_definition ->product_definition => {product_definition.description = 'intended'} usage_of_facility_in_connection
#25: if realization_ of_intended_object_ by_actual relates two usage_of_feature_ in_connection_of_ material objects	shape_aspect_relationship	41		{shape_aspect_relationship.name = 'realization'}
#25: realization_of_ intended_object_by_ actual to usage_of_ feature_in_ connection_of_ materials (as actual)	PATH			shape_aspect_relationship {shape_aspect_relationship.related_shape_aspect ->shape_aspect => {shape_aspect.description = 'actual'} usage_of_feature_in_connection}
#25: realization_of_ intended_object_by_ actual to usage_of_ feature_in_ connection_of_ materials (as intended)	PATH			shape_aspect_relationship {shape_aspect_relationship.relating_shape_aspect ->shape_aspect => {shape_aspect.description = 'intended'} usage_of_feature_in_connection}
#26: if realization_ of_intended_object_ by_actual relates two usage_of_ material_in_ connection objects	product_definition_ relationship	41		{product_definition_relationship.name = 'realization'}

Table 20 (– Mapping table life_cycle UoF (uof14)) concluded

Application element	AIM element	Source	Rules	Reference path
#26: realization_of_ intended_object_by_ actual to usage_of_ material_in_ connections (as actual)	PATH			product_definition_relationship product_definition_relationship.related_product_definition -> product_definition => {product_definition.description = 'actual'} usage_of_material_in_connection
#26: realization_of_ intended_object_by_ actual to usage_of_ material_in_ connections (as intended)	PATH			product_definition_relationship product_definition_relationship.relating_product_definition -> product_definition => {product_definition.description = 'intended'} usage_of_material_in_connection

Table 21 – Mapping table plant_item UoF (uof15)

Application element	AIM element	Source	Rules	Reference path
FACILITY #1: if facility is a specific facility #2: if facility is a typical facility #3: if facility is a catalogue of typical facility objects	#1:(product_definition) #2: (product_definition) #3: (library_context)	41 41 41	5	#1: ({product_definition product_definition.frame_of_reference -> product_definition_context <= application_context_element application_context_element.name = 'functional occurrence'}) #2:({product_definition product_definition.frame_of_reference -> product_definition_context <= application_context_element application_context_element.name = 'functional definition'}) #3: ({library_context library_context.library_reference = 'typical facility catalogue'})
MATERIAL #1: if material is a specific material #2: if material is a typical material #3: if material is a catalogue of typical materials	#1: product_definition #2: (product_definition) #3: (library_context)	41 41 41	5	#1:({product_definition product_definition.frame_of_reference -> product_definition_context <= application_context_element application_context_element.name = 'physical occurrence'}) #2: ({product_definition product_definition.frame_of_reference -> product_definition_context <= application_context_element application_context_element.name = 'physical definition'}) #3: ({library_context library_context.library_reference = 'typical material catalogue'})
PROVISION_OF_SERVICE_BY_MATERIAL	provision_of_service	221	7	provision_of_service <= [product_definition] [product_definition_relationship]

Table 21 (– Mapping table plant_item UoF (uof15)) concluded

Application element	AIM element	Source	Rules	Reference path
provision_of_service_ by_material to facility (as service) #1: if material is a specific facility #2: if material is a typical facility #3: not relevant	PATH			provision_of_service <= product_definition_relationship product_definition_relationship.relating_product_definition #1: (product_definition) #2: (product_definition)
provision_of_service_ by_material to material (as resource) #1: if material is a specific material #2: if material is a typical material #3: not relevant	PATH			provision_of_service <= product_definition_relationship product_definition_relationship.related_product_definition #1: (product_definition) #2: (product_definition)

Table 22 – Mapping table position_and_orientation UoF (uof16)

Application element	AIM element	Source	Rules	Reference path
ORIENTATION	descriptive_representation_item	221		descriptive_representation_item <= representation
ORIENTATION_OF_MATERIAL	orientation_of_material	221		orientation_of_material <= [shape_aspect] [shape_aspect_relationship]
orientation_of_material to material (as what) #1: if material is a specific material #2: if material is a typical material #3: not relevant	PATH			shape_aspect_relationship shape_aspect_relationship.related_shape_aspect -> shape_aspect shape_aspect.of_shape -> product_definition_shape <= property_definition property_definition.definition -> characterized_definition characterized_definition = characterized_product_definition characterized_product_definition = product_definition #1: (product_definition) #2: (product_definition)
orientation_of_material to orientation (as how)	PATH			shape_aspect_relationship shape_aspect_relationship.relating_shape_aspect -> shape_aspect shape_definition = shape_aspect shape_definition <- property_definition_representation.definition property_definition_representation property_definition_representation.used_representation -> representation <= descriptive_representation_item
ORIENTATION_OF_RESOURCE_FOR_FACILITY	orientation_of_resource_for_facility	221		orientation_of_resource_for_facility <= [shape_aspect] [shape_aspect_relationship]

Table 22 (– Mapping table position_and_orientation UoF (uof16)) continued

Application element	AIM element	Source	Rules	Reference path
orientation_of_ resource_for_ facility to facility (as what) #1: if facility is a specific facility #2: if facility is a typical facility #3: not relevant	PATH			shape_aspect_relationship shape_aspect_relationship.related_shape_aspect ->shape_aspect shape_aspect.of_shape ->product_definition_shape <=property_definition property_definition.definition ->characterized_definition characterized_definition = characterized_product_definition characterized_product_definition = product_definition #1: (product_definition) #2: (product_definition)
orientation_of_ resource_for_ facility to orientation (as how)	PATH			shape_aspect_relationship shape_aspect_relationship.relating_shape_aspect ->shape_aspect shape_definition = shape_aspect shape_definition <-property_definition_representation.definition property_definition_representation property_definition_representation.used_representation ->representation <=descriptive_representation_item
POINT_IN_SPACE	descriptive_representation_item	221		descriptive_representation_item <=representation
POINT_IN_SPACE_OF_ MATERIAL	point_in_space_of_material	221		point_in_space_of_material <= [shape_aspect] [shape_aspect_relationship]

Table 22 (– Mapping table position_and_orientation UoF (uof16)) continued

Application element	AIM element	Source	Rules	Reference path
point_in_space_of_ material to material (as what) #1: if material is a specific material #2: if material is a typical material #3: not relevant	PATH			shape_aspect_relationship shape_aspect_relationship.related_shape_aspect -> shape_aspect shape_aspect.of_shape -> product_definition_shape <= property_definition property_definition.definition -> characterized_definition characterized_definition = characterized_product_definition characterized_product_definition = product_definition #1: (product_definition) #2: (product_definition)
point_in_space_of_ material to point_in_ space (as where)	PATH			shape_aspect_relationship shape_aspect_relationship.relating_shape_aspect -> shape_aspect shape_definition = shape_aspect shape_definition <- property_definition_representation.definition property_definition_representation property_definition_representation.used_representation -> representation <= descriptive_representation_item
POINT_IN_SPACE_OF_ RESOURCE_FOR_ FACILITY	point_in_space_of_resource_ for_facility	221		point_in_space_of_resource_for_facility <= [shape_aspect] [shape_aspect_relationship]

Table 22 (– Mapping table position_and_orientation UoF (uof16)) concluded

Application element	AIM element	Source	Rules	Reference path
point_in_space_of_ resource_for_ facility to facility (as what) #1: if facility is a specific facility #2: if facility is a typical facility #3: not relevant	PATH			shape_aspect_relationship shape_aspect_relationship.related_shape_aspect -> shape_aspect shape_aspect.of_shape -> product_definition_shape <= property_definition property_definition.definition -> characterized_definition characterized_definition = characterized_product_definition characterized_product_definition = product_definition #1: (product_definition) #2: (product_definition)
point_in_space_of_ resource_for_ facility to point_in_ space (as where)	PATH			shape_aspect_relationship shape_aspect_relationship.relating_shape_aspect -> shape_aspect shape_definition = shape_aspect shape_definition <- property_definition_representation.definition property_definition_representation property_definition_representation.used_representation -> representation <= descriptive_representation_item

Table 23 – Mapping table process_material_and_substance UoF (uof17)

Application element	AIM element	Source	Rules	Reference path
CLASS_OF_SUBSTANCE #1: if class_of_substance is user defined #2: if class_of_substance is defined in this part of ISO 10303 #3: if class_of_substance is externally defined	#1: (class_of_substance) #2: (standard_class_of_substance) #3: (externally_defined_class_of_substance)	221 221 221		#1: (class_of_substance <= class_of_material <= [product_category] [characterized_object]) #2: (standard_class_of_substance <= [class_of_substance <= class_of_material <= [product_category] [characterized_object]] [pre_defined_item]) #3: (externally_defined_class_of_substance <= [class_of_substance <= class_of_material <= [product_category] [characterized_object]] [externally_defined_item])
CLASSIFICATION_OF_MATERIAL_BY_CLASS_OF_SUBSTANCE	classification_of_material	221		{classification_of_material <= product_related_product_category <= product_category product_category.name = 'classifier'}
classification_of_material_by_class_of_substance to class_of_substance (as classifier)	PATH			classification_of_material <= product_related_product_category <= product_category <- product_category_relationship.category product_category_relationship {product_category_relationship.name = 'class assignment'} product_category_relationship.subcategory ->> product_category => class_of_material => class_of_substance

Table 23 (– Mapping table process_material_and_substance UoF (uof17)) continued

Application element	AIM element	Source	Rules	Reference path
classification_of_ material_by_class_of_ substance to material (as classified)	PATH			classification_of_material<= product_related_product_category product_related_product_category.products[i] -> product <- product_definition_formation.of_product product_definition_formation <- product_definition.formation product_definition
CLASSIFICATION_OF_ PROCESS_MATERIAL_BY_ PHASE	classification_of_material	221		classification_of_material <= product_related_product_category <= product_category => {product_category.name = 'classifier'}
classification_of_ process_material_by_ phase to phase (as classifier)	PATH			classification_of_material <= product_related_product_category <= product_category <- product_category_relationship.category product_category_relationship {product_category_relationship.name = 'class assignment'} product_category_relationship.subcategory -> product_category => class_of_material => phase_of_material
classification_of_ process_material_by_ phase to process_material (as classified)	PATH			classification_of_material<= product_related_product_category product_related_product_category.products[i] -> product <- product_definition_formation.of_product product_definition_formation <- product_definition.formation product_definition
PHASE	phase_of_material	221		phase_of_material <= class_of_material <= product_category
PROCESS_MATERIAL	product_definition	41		product_definition product_definition.frame_of_reference -> product_definition_context <=

Table 23 (– Mapping table process_material_and_substance UoF (uof17)) concluded

Application element	AIM element	Source	Rules	Reference path
				application_context_element ({application_context_element.name = 'physical definition'}) ({application_context_element.name = 'physical occurrence'}) application_context_element.frame_of_reference ->application_context {application_context.application = 'process material'}

Table 24 – Mapping table property UoF (uof18)

Application element	AIM element	Source	Rules	Reference path
CLASS_OF_PROPERTY #1: if class_of_property is user defined #2: if class_of_property is defined in this part of ISO 10303 #3: if class_of_property is externally defined	#1: (class_of_property) #2: (standarad_class_of_property) #3: (externally_defined_class_of_property)	221 221 221		#1: (class_of_property <= group) #2: (standard_class_of_property <= [class_of_property <= group] [pre_defined_item]) #3: (externally_defined_class_of_property <= [class_of_property <= group] [externally_defined_item])
CLASSIFICATION_OF_PROPERTY	plant_functional_property_classification_assignment	221		plant_functional_property_classification_assignment <= group_assignment
classification_of_property to class_of_property (as classifier)	PATH			plant_functional_property_classification_assignment <= group_assignment group_assignment.assigned_group ->group => class_of_property
classification_of_property to property (as classified)	PATH			plant_functional_property_classification_assignment plant_functional_property_classification_assignment.items[i] ->class_of_property_item class_of_property_item = property_definition property_definition
COMPOSITION_OF_INFORMATION_CONTENT if composition_of_information_content refers to representation	composition_of_information_content	221		composition_of_information_content <= product_definition_relationship {product_definition_relationship.name = 'composition'}
composition_of_information_content to information_content (as part)	PATH			composition_of_information_content <= product_definition_relationship product_definition_relationship.related_product_definition ->product_definition characterized_product_definition = product_definition characterized_product_definition

Table 24 (– Mapping table property UoF (uof18)) continued

Application element	AIM element	Source	Rules	Reference path
				characterized_definition = characterized_product_definition characterized_definition <- property_definition.definition property_definition <- property_definition_representation.definition property_definition_representation property_definition_representation.used_representation -> representation
composition_of_ information_content to information_ content (as whole)	PATH			composition_of_information_content <= product_definition_relationship composition_of_information_content <= product_definition_relationship product_definition_relationship.relating_product_definition -> product_definition characterized_product_definition = product_definition characterized_product_definition characterized_definition = characterized_product_definition characterized_definition <- property_definition.definition property_definition <- property_definition_representation.definition property_definition_representation property_definition_representation.used_representation -> representation
ENUMERATED_PROPERTY_ IN_CLASS_OF_PROPERTY	plant_functional_ enumerated_property_in_ class_of_property_ assignment	221		plant_functional_enumerated_property_in_class_of_property_assignment <= group_assignment
enumerated_property_ in_class_of_property to class_of_property (as class)	PATH			plant_functional_enumerated_property_in_class_of_property_assignment <= group_assignment group_assignment.assigned_group -> group => class_of_property

Table 24 (– Mapping table property UoF (uof18)) continued

Application element	AIM element	Source	Rules	Reference path
enumerated_property_ in_class_of_property to property (as member)	PATH			plant_functional_enumerated_property_in_class_of_\ property_assignment plant_functional_enumerated_property_in_class_of_\ property_assignment.items[i] ->> class_of_property_item class_of_property_item = property_definition property_definition
NUMERIC_OPERATOR	plant_functional_numeric_ operator	221		plant_functional_numeric_operator <= qualified_representation_item
operator	type_qualifier.name	221		plant_functional_numeric_operator <= qualified_representation_item qualified_representation_item.qualifiers[i] ->> value_qualifier value_qualifier = type_qualifier type_qualifier type_qualifier.name
NUMERIC_VALUE #1: the numeric_value does not include a numeric_ operator #2: the numeric_value includes a numeric_operator	#1: (measure_ representation_item) #2: ([measure_ representation_item] [plant_functional_numeric_ operator])	45 45 221		#2: plant_functional_numeric_operator <= qualified_representation_item <= representation_item => measure_representation_item <= measure_with_unit
content	measure_with_unit.value_ component	41		#1: (measure_representation_item) #2: ([plant_functional_numeric_operator] [measure_representation_item]) measure_representation_item <= measure_with_unit {(=> length_measure_with_unit) (=> mass_measure_with_unit) (=> time_measure_with_unit)

Table 24 (– Mapping table property UoF (uof18)) continued

Application element	AIM element	Source	Rules	Reference path
				(=> electric_current_measure_with_unit) (=> thermodynamic_temperature_measure_with_unit) (=> amount_of_substance_measure_with_unit) (=> luminous_intensity_measure_with_unit) (=> plane_angle_measure_with_unit) (=> solid_angle_measure_with_unit) (=> area_measure_with_unit) (=> volume_measure_with_unit) (=> ratio_measure_with_unit)} measure_with_unit.value_component -> measure_value (measure_value = length_measure) (measure_value = mass_measure) (measure_value = time_measure) (measure_value = electric_current_measure) (measure_value = thermodynamic_temperature_measure) (measure_value = amount_of_substance_measure) (measure_value = luminous_intensity_measure) (measure_value = plane_angle_measure) (measure_value = solid_angle_measure) (measure_value = area_measure) (measure_value = volume_measure) (measure_value = ratio_measure) (measure_value = parameter_valuee) (measure_value = numeric_measure) (measure_value = context_dependent_measure) (measure_value = descriptive_measure) (measure_value = positive_length_measure) (measure_value = positive_plane_angle_measure) (measure_value = positive_ratio_measure) (measure_value = count_measure)
numeric_value to numeric_operator (as qualifier)	PATH			#2: measure_representation_item <= representation_item => qualified_representation_item=> plant_functional_numeric_operator

Table 24 (– Mapping table property UoF (uof18)) continued

Application element	AIM element	Source	Rules	Reference path
numeric_value to unit_of_measure (as referenced)	PATH			#1: (measure_representation_item) #2: ([plant_functional_numeric_operator] [measure_representation_item]) measure_representation_item <= measure_with_unit {(=> length_measure_with_unit) (=> mass_measure_with_unit) (=> time_measure_with_unit) (=> electric_current_measure_with_unit) (=> thermodynamic_temperature_measure_with_unit) (=> amount_of_substance_measure_with_unit) (=> luminous_intensity_measure_with_unit) (=> plane_angle_measure_with_unit) (=> solid_angle_measure_with_unit) (=> area_measure_with_unit) (=> volume_measure_with_unit) (=> ratio_measure_with_unit)} measure_with_unit.unit_component ->unit (unit = derived_unit derived_unit) (unit = named_unit {named_unit (=> length_unit) (=> mass_unit) (=> time_unit) (=> electric_current_unit) (=> thermodynamic_temperature_unit) (=> amount_of_substance_unit) (=> luminous_intensity_unit) (=> plane_angle_unit) (=> solid_angle_unit) (=> area_unit) (=> volume_unit) (=> ratio_unit)})

Table 24 (– Mapping table property UoF (uof18)) continued

Application element	AIM element	Source	Rules	Reference path
				measure_with_unit.unit_component
POSSESSION_OF_ PROPERTY_BY_EACH_ MEMBER_OF_COLLECTION	property_definition. definition	41		
possession_of_ property_by_each_ member_of_collection to property (as possessed)	PATH			property_definition.definition property_definition
possession_of_ property_by_each_ member_of_collection to activity (as possessor)	PATH			property_definition.definition property_definition <- process_property_association.property process_property_association process_property_association.process ->product_definition_process <= (action) (action action.chosen_method ->action_method)
possession_of_ property_by_each_ member_of_collection to facility (as possessor) #1: if facility is a specific facility #2: if facility is a typical facility #3: if facility is a catalogue of typical facility objects	PATH			property_definition.definition ->characterized_definition characterized_definition = characterized_product_definition #1: (characterized_product_definition = product_definition product_definition) #2: (characterized_product_definition = product_definition product_definition) #3: (characterized_product_definition = library_context library_context)

Table 24 (– Mapping table property UoF (uof18)) continued

Application element	AIM element	Source	Rules	Reference path
possession_of_ property_by_each_ member_of_collection to feature (as possessor)	PATH			property_definition.definition -> characterized_definition characterized_definition = shape_definition shape_definition = shape_aspect shape_aspect
possession_of_ property_by_each_ member_of_collection to material (as possessor) #1: if material is a specific material #2: if material is a typical material #3: if material is a catalogue of typical materials	PATH			property_definition.definition -> characterized_definition characterized_definition = characterized_product_definition #1: (characterized_product_definition = product_definition product_definition) #2: (characterized_product_definition = product_definition product_definition) #3: (characterized_product_definition = library_context) library_context)
POSSESSION_OF_ PROPERTY_BY_OBJECT #1: if object is activity	action_property	49		action_property
#1: possession_of_ property_by_object to property (as possessed)	PATH			action_property action_property.definition -> characterized_action_definition characterized_action_definition = action action => product_property_process <- process_property_association.process process_property_association process_property_association.property -> property_definition

Table 24 (– Mapping table property UoF (uof18)) continued

Application element	AIM element	Source	Rules	Reference path
#1: possession_of_ property_by_object to activity (as possessor)	PATH			action_property action_property.characterized_action_definition characterized_action_definition = action (action) (action action.chosen_method -> action_method)
#2: if object is facility	property_by_member	221		property_by_member <= property_definition
#2: possession_of_ property_by_object to property (as possessed)	PATH			property_by_member <= property_definition
#2: possession_of_ property_by_object to facility (as possessor) if facility is a specific facility if facility is a typical facility if facility is a catalogue of typical facility objects	PATH			property_by_member <= property_definition property_definition.definition -> characterized_definition = characterized_product_definition (characterized_product_definition =product_definition) product_definition) (characterized_product_definition =product_definition) product_definition) (characterized_product_definition =library_context) library_context)
#3: if object is feature	property_definition. definition	41		property_definition.definition
#3: possession_of_ property_by_object to property (as possessed)	PATH			property_definition.definition property_definition
#3: possession_of_ property_by_object to feature (as possessor)	PATH			property_definition.definition -> characterized_definition characterized_definition = shape_definition shape_definition = shape_aspect shape_aspect

Table 24 (– Mapping table property UoF (uof18)) continued

Application element	AIM element	Source	Rules	Reference path
#4: if object is material	property_by_member	221		property_by_member <= property_definition
#4: possession_of_property_by_object to property (as possessed)	PATH			property_by_member <= property_definition
#4: possession_of_property_by_object to material (as possessor)	PATH			property_by_member <= property_definition property_definition.definition -> characterized_definition = characterized_product_definition (characterized_product_definition = product_definition product_definition) (characterized_product_definition = product_definition product_definition) (characterized_product_definition = library_context library_context)
PROPERTY	property_definition	41		
PROPERTY_BASIS_FOR_CLASS_MEMBERSHIP	plant_functional_recognized_possession_of_property_assignment	221		plant_functional_recognized_possession_of_property_assignment <= group_assignment
property_basis_for_class_membership to property (as basis)	PATH			plant_functional_recognized_possession_of_property_assignment <= group_assignment group_assignment.assigned_group -> group => class_of_property <= group <- group_assignment.assigned_group group_assignment => plant_functional_property_classification_assignment plant_functional_property_classification_assignment.items[i] -> class_of_property_item class_of_property_item = property_definition property_definition

Table 24 (– Mapping table property UoF (uof18)) concluded

Application element	AIM element	Source	Rules	Reference path
property_basis_for_ class_membership to property_possessing_ class_of_object (as class)	PATH			plant_functional_recognized_possession_of_property_assignment plant_functional_recognized_possession_of_property_assignment.items[i] possessed_class_of_property_item (possessed_class_of_property_item = class_of_activity class_of_activity) (possessed_class_of_property_item = class_of_facility class_of_facility) (possessed_class_of_property_item = class_of_material class_of_material)
UNIT_OF_MEASURE	measure_with_unit.unit_ component	41		

Table 25 – Mapping table required_information UoF (uof19)

Application element	AIM element	Source	Rules	Reference path
REQUIRED_INPUT_ DESCRIPTION_ ACCORDING_TO_CLASS #1: if required_input_ description_according_to_ class has the purpose activity	plant_functional_activity_ input_information_content_ constraint_assignment	221		plant_functional_activity_input_information_content_\ constraint_assignment <= action_assignment
#1: required_input_ description_ according_to_class to activity (as purpose)	PATH			plant_functional_activity_input_information_content_\ constraint_assignment <= action_assignment action_assignment.assigned_action -> (action) (action action.chosen_method -> action_method)
#1: required_input_ description_ according_to_class to recognized_ description_of_ object_according_to_ class (as requirement)	PATH			plant_functional_activity_input_information_content_\ constraint_assignment plant_functional_activity_input_information_content_\ constraint_assignment.items[i] -> input_output_information_content_description_item input_output_information_content_description_item = \ plant_functional_class_of_object_description_constraint_assignment plant_functional_class_of_object_description_constraint_assignment
#2: if required_ input_description_ according_to_class has the purpose class_of_activity	plant_functional_activity_ input_information_content_ class_constraint_ assignment	221		plant_functional_activity_input_information_content_class_\ constraint_assignment <= group_assignment
#2: required_input_ description_ according_to_class to class_of_activity (as purpose)	PATH			plant_functional_activity_input_information_content_class_\ constraint_assignment <= group_assignment group_assignment.assigned_group -> group => class_of_activity

Table 25 (– Mapping table required_information UoF (uof19)) continued

Application element	AIM element	Source	Rules	Reference path
#2: required_input_ description_ according_to_class to recognized_ description_of_ object_according_to_ class (as requirement)	PATH			plant_functional_activity_input_information_content_class_\ constraint_assignment plant_functional_activity_input_information_content_class_\ constraint_assignment.items[i] -> input_output_information_content_description_item input_output_information_content_description_item = \ plant_functional_class_of_object_description_constraint_assignment plant_functional_class_of_object_description_constraint_assignment
REQUIRED_INPUT_OF_ PROPERTY_VALUE_ ACCORDING_TO_CLASS #1: if required_input_of_ property_value_according_to_ class has the purpose activity	plant_functional_activity_ input_property_constraint_ assignment	221		plant_functional_activity_input_property_\ constraint_assignment <= action_assignment
#1: required_input_ of_property_value_ according_to_class to activity (as purpose)	PATH			plant_functional_activity_input_property_\ constraint_assignment <= action_assignment action_assignment.assigned_action -> (action) (action action.chosen_method -> action_method)
#1: required_input_ of_property_value_ according_to_class to recognized_of_ property_value_of_ object_according_to_ class (as requirement)	PATH			plant_functional_activity_input_property_\ constraint_assignment plant_functional_activity_input_property_\ constraint_assignment.items[i] -> input_output_property_possession_item input_output_property_possession_item = \ plant_functional_recognized_possession_of_property_assignment plant_functional_recognized_possession_of_property_assignment

Table 25 (– Mapping table required_information UoF (uof19)) continued

Application element	AIM element	Source	Rules	Reference path
#2: if required_ input_of_property_ value_according_to_ class has the purpose class_of_ activity	plant_functional_activity_ input_property_class_ constraint_assignment	221		plant_functional_activity_input_property_class_\ constraint_assignment <= group_assignment
#2: required_input_ of_property_value_ according_to_class to class_of_activity (as purpose)	PATH			plant_functional_activity_input_property_class_\ constraint_assignment <= group_assignment group_assignment.assigned_group -> group => class_of_activity
#2: required_input_ of_property_value_ according_to_class to recognized_of_ property_value_of_ object_according_to_ class (as requirement)	PATH			plant_functional_activity_input_property_class_\ constraint_assignment <= plant_functional_activity_input_property_class_\ constraint_assignment.items[i] -> input_output_property_possession_item input_output_property_possession_item = \ plant_functional_recognized_possession_of_property_assignment plant_functional_recognized_possession_of_property_assignment
REQUIRED_OUTPUT_ DESCRIPTION_ ACCORDING_TO_CLASS #1: if required_output_ description_according_to_ class has the purpose activity	plant_functional_activity_ output_information_content_ constraint_assignment	221		plant_functional_activity_output_information_content_\ constraint_assignment <= action_assignment
#1: required_output_ description_ according_to_class to activity (as purpose)	PATH			plant_functional_activity_output_information_content_\ constraint_assignment <= action_assignment action_assignment.assigned_action -> (action) (action action.chosen_method -> action_method)

Table 25 (– Mapping table required_information UoF (uof19)) continued

Application element	AIM element	Source	Rules	Reference path
#1: required_output_ description_ according_to_class to recognized_ description_of_ object_according_to_ class (as requirement)	PATH			plant_functional_activity_output_information_content_\ constraint_assignment plant_functional_activity_output_information_content_\ constraint_assignment.items[i] -> input_output_information_content_description_item input_output_information_content_description_item = \ plant_functional_class_of_object_description_constraint_assignment plant_functional_class_of_object_description_constraint_assignment
#2: if required_ output_description_ according_to_class has the purpose class_of_activity	plant_functional_activity_ output_information_content_ class_constraint_ assignment	221		plant_functional_activity_output_information_content_class_\ constraint_assignment <= group_assignment
#2: required_output_ description_ according_to_class to class_of_activity (as purpose)	PATH			plant_functional_activity_output_information_content_class_\ constraint_assignment <= group_assignment group_assignment.assigned_group -> group => class_of_activity
#2: required_output_ description_ according_to_class to recognized_ description_of_ object_according_to_ class (as requirement)	PATH			plant_functional_activity_output_information_content_class_\ constraint_assignment <= plant_functional_activity_output_information_content_class_\ constraint_assignment.items[i] -> input_output_information_content_description_item input_output_information_content_description_item = \ plant_functional_class_of_object_description_constraint_assignment plant_functional_class_of_object_description_constraint_assignment
REQUIRED_OUTPUT_OF_ PROPERTY_VALUE_ ACCORDING_TO_CLASS #1: if required_output_of_ property_value_according_to_ class has the purpose activity	plant_functional_activity_ output_property_constraint_ assignment	221		plant_functional_activity_output_property_\ constraint_assignment <= action_assignment

Table 25 (– Mapping table required_information UoF (uof19)) continued

Application element	AIM element	Source	Rules	Reference path
#1: required_output_ of_property_value_ according_to_class to activity (as purpose)	PATH			plant_functional_activity_output_property_\ constraint_assignment <= action_assignment action_assignment.assigned_action -> (action) (action action.chosen_method -> action_method)
#1: required_output_ of_property_value_ according_to_class to recognized_of_ property_value_of_ object_according_to_ class (as requirement)	PATH			plant_functional_activity_output_property_\ constraint_assignment plant_functional_activity_output_property_\ constraint_assignment.items[i] -> input_output_property_possession_item input_output_property_possession_item = \ plant_functional_recognized_possession_of_property_assignment plant_functional_recognized_possession_of_property_assignment
#2: if required_ output_of_property_ value_according_to_ class has the purpose class_of_ activity	plant_functional_activity_ output_property_class_ constraint_assignment	221		plant_functional_activity_output_property_class_\ constraint_assignment <= group_assignment
#2: required_output_ of_property_value_ according_to_class to class_of_activity (as purpose)	PATH			plant_functional_activity_output_property_class_\ constraint_assignment <= group_assignment group_assignment.assigned_group -> group => class_of_activity

Table 25 (– Mapping table required_information UoF (uof19)) concluded

Application element	AIM element	Source	Rules	Reference path
#2: required_output_ of_property_value_ according_to_class to recognized_of_ property_value_of_ object_according_to_ class (as requirement)	PATH			plant_functional_activity_output_property_class_\ constraint_assignment <= plant_functional_activity_output_property_class_\ constraint_assignment.items[i] -> input_output_property_possession_item input_output_property_possession_item = \ plant_functional_recognized_possession_of_property_assignment plant_functional_recognized_possession_of_property_assignment

Table 26 – Mapping table schematic_appearance UoF (uof20)

Application element	AIM element	Source	Rules	Reference path
2D_BOX_DIMENSIONS	planar_box	46		
2d_box_dimension to length_measure (as height)	planar_extent.size_in_x	46		planar_extent.size_in_x planar_extent => planar_box
2d_box_dimension to length_measure (as width)	planar_extent.size_in_y	46		planar_extent.size_in_y planar_extent => planar_box
2D_SCALE as used to scale an annotation_element	symbol_target	46		
2d_scale to numeric_ value (as x_scale)	symbol_target.x_scale	46		
2d_scale to numeric_ value (as y_scale)	symbol_target.y_scale	46		
APPEARANCE_FOR_ ANNOTATION_TEXT	annotation_text_occurrence	46		
appearance_for_ annotation_text to annotation_text (as described)	PATH			annotation_text_occurrence <= annotation_occurrence <= styled_item styled_item.item -> representation_item => (mapped_item => annotation_text) (geometric_representation_item => text_literal)
appearance_for_ annotation_text to text_appearance (as describing)	PATH			annotation_text_occurrence <= annotation_occurrence <= styled_item styled_item.styles[i] -> presentation_style_assignment presentation_style_assignment.style[i] -> presentation_style_select presentation_style_select = text_style text_style => text_style_with_box_characteristics

Table 26 (– Mapping table schematic_appearance UoF (uof20)) continued

Application element	AIM element	Source	Rules	Reference path
CLIPPING_BOX_FOR_ DERIVATION (for a view)	presentation_view_with_ clipping_box	221		presentation_view_with_clipping_box <= presentation_view
clipping_box_for_ derivation to 2d_box_ dimension (as describing)	PATH			presentation_view_with_clipping_box <= presentation_view <= presentation_representation <= representation representation.items[i] -> representation_item => geometric_representation_item => planar_extent => planar_box
clipping_box_for_ derivation to view_ derivation_for_ annotation_element (as described)	IDENTICAL MAPPING			
COLOUR_RGB	colour_rgb	46		
colour_rgb to ratio_ measure (as blue)	PATH			colour_rgb colour_rgb.blue -> ratio_measure
colour_rgb to ratio_ measure (as green)	PATH			colour_rgb colour_rgb.green -> ratio_measure
colour_rgb to ratio_ measure (as red)	PATH			colour_rgb colour_rgb.red -> ratio_measure
DESCRIPTION_OF_ HATCHING_BY_PITCH	fill_area_style_hatching	46		
pitch_for_hatching to hatching_ derivation_for_ annotation_element (as described)	PATH			fill_area_style_hatching <= fill_style_select <- fill_area_style.styles[i] fill_area_style <- presentation_style_select <- presentation_style_assignment.styles[i] presentation_style_assignment <-

Table 26 (– Mapping table schematic_appearance UoF (uof20)) continued

Application element	AIM element	Source	Rules	Reference path
				styled_item.style[i] styled_item => annotation_occurrence => annotation_fill_area_occurrence
pitch_for_hatching to 2d_vector (as describing)	PATH			fill_area_style_hatching fill_area_style_hatching.start_of_next_hatch_line -> one_direction_repeat_factor one_direction_repeat_factor.repeat_factor -> vector
DESCRIPTION_OF_ TILING_BY_PATTERN	fill_area_style_tiles	46		
description_of_ tiling_by_pattern to tiling_derivation_ for_annotation_ element (as described)	PATH			fill_area_style_tiles <= fill_style_select<- fill_area_style.fill_styles[i] fill_area_style <- presentation_style_assignment.styles[i] presentation_style_assignment <- styled_item.style[i] styled_item => annotation_occurrence => annotation_fill_area_occurrence
description_of_ tiling_by_pattern to tiling_pattern (as describing)	PATH			fill_area_style_tiles fill_area_style_tiles.tiling_pattern -> two_direction_repeat_factor
HATCHING_DERIVATION_ FOR_ANNOTATION_ ELEMENT	annotation_fill_area_ occurrence	46		
INVISIBLE_ANNOTATION_ ELEMENT_IN_VIEW	context_dependent_ invisibility	46		
invisible_annotation_ element_in_view to annotation_element (as excluded)	PATH			context_dependent_invisibility <= invisibility invisibility.invisible_item[i] -> invisible_item invisible_item = styled_item styled_item =>

Table 26 (– Mapping table schematic_appearance UoF (uof20)) continued

Application element	AIM element	Source	Rules	Reference path
				annotation_occurrence
invisible_annotation_ element_in_view to view_derivation_for_ annotation_element (as view)	IDENTICAL MAPPING			
LEADER_TERMINATOR_ FOR_ANNOTATION_CURVE	leader_curve	101		
leader_terminator_ for_annotation_curve to annotation_curve (as possessor)	IDENTICAL_MAPPING			
leader_terminator_ for_annotation_curve to annotation_point (as describing)	PATH			leader_curve <= annotation_curve_occurrence<- terminator_symbol {=> leader_terminator} <= annotation_symbol_occurrence
LINE_PATTERN	curve_style_font_select	46		
line_pattern to length_measure (as pattern)	curve_style_font_select. pattern_list	46		
LINE_PATTERN_FOR_ ANNOTATION_CURVE	annotation_curve_ occurrence	46		
line_pattern_for_ annotation_curve to annotation_curve (as described)	PATH			annotation_curve_occurrence <= annotation_occurrence <= styled_item styled_item.item -> representation_item => geometric_representation_item => curve
line_pattern_for_ annotation_curve to line_pattern (as describing)	PATH			annotation_curve_occurrence <= annotation_occurrence <= styled_item styled_item.styles[i] -> presentation_style_assignment presentation_style_assignment.styles[i] ->

Table 26 (– Mapping table schematic_appearance UoF (uof20)) continued

Application element	AIM element	Source	Rules	Reference path
				presentation_style_select presentation_style_select = curve_style curve_style curve_style.curve_font -> curve_font_or_scaled_curve_font_select curve_font_or_scaled_curve_font_select = curve_style_font_select curve_style_font_select
POINT_MARKER_SYMBOL	annotation_symbol_ occurrence	46		{annotation_symbol_occurrence <= annotation_occurrence <= styled_item styled_item.item -> representation_item => geometric_representation_item => defined_symbol defined_symbol.definition -> defined_symbol_select defined_symbol_select = pre_defined_symbol pre_defined_symbol}
SCALING_FOR_ DERIVATION	symbol_target	46		
scaling_for_ derivation to derivation of annotation_element (as described)	PATH			(symbol_target <- defined_symbol.target defined_symbol) (symbol_target <= geometric_representation_item <= representation_item <- mapped_item.mapping_target mapped_item => annotation_symbol)
scaling_for_ derivation to 2d_ scale (as describing)	PATH			symbol_target [symbol_target.x_scale -> positive_ratio_measure] [symbol_target.y_scale -> positive_ratio_measure]
TERMINATOR_SYMBOL	annotation_symbol_ occurrence	46		{annotation_symbol_occurrence<= annotation_occurrence <=

Table 26 (– Mapping table schematic_appearance UoF (uof20)) continued

Application element	AIM element	Source	Rules	Reference path
				styled_item styled_item.item ->> representation_item => geometric_representation_item => defined_symbol defined_symbol.definition ->> defined_symbol_select defined_symbol_select = pre_defined_symbol pre_defined_symbol}
TEXT_APPEARANCE	text_style_with_box_characteristics	46		
text_appearance to angle_measure (as slant_angle)	PATH			text_style_with_box_characteristics text_style_with_box_characteristics.characteristics[i] ->> box_characteristic_select = box_slant_angle box_slant_angle box_slant_angle = plane_angle_measure
text_appearance to angle_measure (as rotation_angle)	PATH			text_style_with_box_characteristics text_style_with_box_characteristics.characteristics[i] ->> box_characteristic_select box_characteristic_select = box_rotate_angle box_rotate_angle box_rotate_angle = plane_angle_measure
text_appearance to ratio_measure (as aspect_ratio)	PATH			{ [text_style_with_box_characteristics text_style_with_box_characteristics.characteristics[i] ->> box_characteristic_select box_characteristic_select = box_height box_height box_height = positive_ratio_measure] [text_style_with_box_characteristics text_style_with_box_characteristics.characteristics[i] ->> box_characteristic_select box_characteristic_select = box_width box_width box_width = positive_ratio_measure]}

Table 26 (– Mapping table schematic_appearance UoF (uof20)) continued

Application element	AIM element	Source	Rules	Reference path
text_appearance to ratio_measure (as scale)	PATH			{ [text_style_with_box_characteristics text_style_with_box_characteristics.characteristics[i] -> box_characteristic_select box_characteristic_select = box_height box_height box_height = positive_ratio_measure] [text_style_with_box_characteristics text_style_with_box_characteristics.characteristics[i] -> box_characteristic_select box_characteristic_select = box_width box_width box_width = positive_ratio_measure]}
TEXT_BOX_FOR_ ANNOTATION_TEXT	(annotation_text_with_ extent) (text_literal_with_ extent)	46 46		
text_box_for_ annotation_text to 2d_box_dimension (as describing)	(annotation_text_with_ extent.extent) (text_literal_with_extent. extent)	46 46		(annotation_text_with_extent annotation_text_with_extent.extent -> planar_extent) (text_literal_with_extent (text_literal_with_extent.extent -> planar_extent)
text_box_for_ annotation_text to annotation_text (as described)	IDENTICAL MAPPING			
TILING_DERIVATION_ FOR_ANNOTATION_ ELEMENT	annotation_fill_area_ occurrence	46		
TILING_PATTERN	two_direction_repeat_ factor	46		

Table 26 (– Mapping table schematic_appearance UoF (uof20)) continued

Application element	AIM element	Source	Rules	Reference path
tiling_pattern to angle_measure (as orientation)	PATH			two_direction_repeat_factor <= one_direction_repeat_factor <= geometric_representation_item => fill_area_style_tiles fill_area_style_tiles.tiles[i] -> fill_area_style_tile_shape_select fill_area_style_tile_shape_select = fill_area_style_tile_symbol_with_style fill_area_style_tile_symbol_with_style fill_area_style_tile_symbol_with_style.symbol -> annotation_symbol_occurrence <= annotation_occurrence <= styled_item styled_item.item -> representation_item => mapped_item {=>annotation_symbol} mapped_item.mapping_target -> representation_item => geometric_representation_item => symbol_target symbol_target.placement -> axis2_placement
tiling_pattern to 2d_ vector (as repeat_1)	PATH			two_direction_repeat_factor <= one_direction_repeat_factor one_direction_repeat_factor.repeat_factor -> vector
tiling_pattern to 2d_ vector (as repeat_2)	PATH			two_direction_repeat_factor <= one_direction_repeat_factor one_direction_repeat_factor.second_repeat_factor -> vector
VIEW_DERIVATION_FOR_ ANNOTATION_ELEMENT	#1: (presentation_view_ with_clipping_box)	221		#1: (presentation_view_with_clipping_box <= presentation_view)
	#2: (context_dependent_ invisibility)	46		

Table 26 (– Mapping table schematic_appearance UoF (uof20)) concluded

Application element	AIM element	Source	Rules	Reference path
WIDTH_FOR_ANNOTATION_CURVE	annotation_curve_occurrence	46		
width_for_annotation_curve to annotation_curve (as described)	PATH			annotation_curve_occurrence <= annotation_occurrence <= styled_item styled_item.item -> representation_item => geometric_representation_item => curve
width_for_annotation_curve to length_measure (as describing)	PATH			annotation_curve_occurrence <= annotation_occurrence <= styled_item styled_item.items[i] -> presentation_style_assignment presentation_style_assignment.styles[i] -> presentation_style_select presentation_style_select = curve_style curve_style curve_style.curve_width -> size_select size_select = (positive_length_measure) (measure_with_unit)

Table 27 – Mapping table schematic_presentation_and_layout UoF (uof21)

Application element	AIM element	Source	Rules	Reference path
2D_CURVE	curve	42		
2D_DIRECTION_RANGE	direction_range_representation	221		direction_range_representation
2d_direction_range to orientation (as to)	PATH			direction_range_representation direction_range_representation.items[i] -> axis2_placement
2d_direction_range to orientation (as from)	PATH			direction_range_representation direction_range_representation.items[i] -> axis2_placement
2D_PLACEMENT	(axis2_placement_2d) (curve)	42 42		
ANNOTATION_AREA	annotation_fill_area	46		
annotation_area to curve (as inner_boundary)	PATH			annotation_fill_area annotation_fill_area.boundaries[i] -> curve
annotation_area to curve (as outer_boundary)	PATH			annotation_fill_area annotation_fill_area.boundaries[i] -> curve
ANNOTATION_CURVE	curve	42		
annotation_curve to curve (as nominal)	IDENTICAL MAPPING			
ANNOTATION_ELEMENT #1: if annotation_element is an entire sheet	PATH			presentation_representation => presentation_area => drawing_sheet_revision

Table 27 (– Mapping table schematic_presentation_and_layout UoF (uof21)) continued

Application element	AIM element	Source	Rules	Reference path
#2: if annotation_ element is a view	PATH			presentation_representation => presentation_view
#3: if annotation_ element is a symbol_ definition	symbol_representation	46		
#4: if annotation_ element is text, curve, point, symbol, or fill area	annotation_occurrence	46		
#5: if annotation_ element is a layer	presentation_layer_ assignment	46	6	
ANNOTATION_POINT	annotation_symbol_ occurrence	46		
annotation_point to point (as nominal)	PATH			annotation_symbol_occurrence <= annotation_occurrence => annotation_point
ANNOTATION_TEXT	(annotation_text) (text_literal)	46 46		
ASSEMBLY_OF_ ANNOTATION_ELEMENT #1: if annotation_element is an entire sheet	presentation_ representation_ relationship	46		
#1: assembly_of_ annotation_element to annotation_ element (as part)	PATH			presentation_representation_relationship <= representation_relationship_with_transformation <= representation_relationship representation_relationship.rep_1 -> presentation_representation => presentation_area => drawing_sheet_revision

Table 27 (– Mapping table schematic_presentation_and_layout UoF (uof21)) continued

Application element	AIM element	Source	Rules	Reference path
#1: assembly_of_ annotation_element to annotation_ element (as whole)	PATH			presentation_representation_relationship <= representation_relationship_with_transformation <= representation_relationship representation_relationship.rep_2 -> presentation_representation => presentation_area => drawing_sheet_revision
#2: if annotation_ element is a view	presentation_ representation_ relationship	46		
#2: assembly_of_ annotation_element to annotation_ element (as part)	PATH			presentation_representation_relationship <= representation_relationship_with_transformation <= representation_relationship representation_relationship.rep_1 -> presentation_representation => presentation_view
#2: assembly_of_ annotation_element to annotation_ element (as whole)	PATH			presentation_representation_relationship <= representation_relationship_with_transformation <= representation_relationship representation_relationship.rep_2 -> presentation_representation => presentation_view
#3: if annotation_ element is a symbol_ definition	symbol_representation_ relationship	46		
#3: assembly_of_ annotation_element to annotation_ element (as part)	PATH			symbol_representation_relationship <= representation_relationship_with_transformation <= representation_relationship representation_relationship.rep_1 -> symbol_representation
#3: assembly_of_ annotation_element to annotation_ element (as whole)	PATH			symbol_representation_relationship <= representation_relationship_with_transformation <= representation_relationship representation_relationship.rep_2 -> symbol_representation

Table 27 (– Mapping table schematic_presentation_and_layout UoF (uof21)) continued

Application element	AIM element	Source	Rules	Reference path
#4: if annotation_ element is text, curve, point, symbol, or fill area	annotation_occurrence_ relationship	46		
#4: assembly_of_ annotation_element to annotation_ element (as part)	PATH			annotation_occurrence_relationship annotation_occurrence_relationship.related_annotation_occurrence -> annotation_occurrence
#4: assembly_of_ annotation_element to annotation_ element (as whole)	PATH			annotation_occurrence_relationship annotation_occurrence_relationship.relating_annotation_occurrence -> annotation_occurrence
#5: if annotation_ element is a layer	presentation_ representation_ relationship	46		
#5: assembly_of_ annotation_element to annotation_ element (as part)	PATH			presentation_representation_relationship presentation_representation_relationship <= representation_relationship representation_relationship.rep_1 -> presentation_representation <- presentation_layer_usage.presentation presentation_layer_usage presentation_layer_usage.assignment -> presentation_layer_assignment
#5: assembly_of_ annotation_element to annotation_ element (as whole)	PATH			presentation_representation_relationship presentation_representation_relationship <= representation_relationship representation_relationship.rep_2 -> presentation_representation <- presentation_layer_usage.presentation presentation_layer_usage presentation_layer_usage.assignment -> presentation_layer_assignment

Table 27 (– Mapping table schematic_presentation_and_layout UoF (uof21)) continued

Application element	AIM element	Source	Rules	Reference path
CENTRE_LINE_FOR_ ANNOTATION_CURVE	curve	42		
centre_line_for_ annotation_curve to annotation_curve (as described)	IDENTICAL MAPPING			
centre_line_for_ annotation_curve to 2d_curve (as describing)	IDENTICAL MAPPING			
CLASS_OF_ANNOTATION_ ELEMENT	class_of_annotation_ element	221		class_of_annotation_element <= group
CLASSIFICATION_OF_ ANNOTATION_ELEMENT	plant_functional_class_of_ annotation_element_ assignment	221		plant_functional_class_of_annotation_element_assignment <= group_assignment
classification_of_ annotation_element to annotation_ element (as classified)	PATH			plant_functional_class_of_annotation_element_assignment plant_functional_class_of_annotation_element_assignment.items[i] -> annotation_element_item (annotation_element_item = annotation_occurrence annotation_occurrence) (annotation_element_item = presentation_representation presentation_representation) (annotation_element_item = drawing_revision drawing_revision) (annotation_element_item = symbol_representation symbol_representation) (annotation_element_item = presentation_layer_assignment presentation_layer_assignment)

Table 27 (– Mapping table schematic_presentation_and_layout UoF (uof21)) continued

Application element	AIM element	Source	Rules	Reference path
classification_of_ annotation_element to class_of_ annotation_element (as classifier)	PATH			plant_functional_class_of_annotation_element_assignment <= group_assignment group_assignment.assigned_group ->> group => class_of_annotation_element
COLLECTION_OF_ ANNOTATION_ELEMENT #1: if annotation_element is an entire sheet	presentation_ representation_ relationship	46		
#1: collection_of_ annotation_element to annotation_ element (as part)	PATH			presentation_representation_relationship <= representation_relationship_with_transformation <= representation_relationship representation_relationship.rep_1 ->> presentation_representation => presentation_area => drawing_sheet_revision
#1: collection_of_ annotation_element to annotation_ element (as whole)	PATH			presentation_representation_relationship <= representation_relationship_with_transformation <= representation_relationship representation_relationship.rep_2 ->> presentation_representation => presentation_area => drawing_sheet_revision
#2: if annotation_ element is a view	presentation_ representation_ relationship	46		
#2: collection_of_ annotation_element to annotation_ element (as part)	PATH			presentation_representation_relationship <= representation_relationship_with_transformation <= representation_relationship representation_relationship.rep_1 ->> presentation_representation => presentation_view

Table 27 (– Mapping table schematic_presentation_and_layout UoF (uof21)) continued

Application element	AIM element	Source	Rules	Reference path
#2: collection_of_ annotation_element to annotation_ element (as whole)	PATH			presentation_representation_relationship <= representation_relationship_with_transformation <= representation_relationship representation_relationship.rep_2 -> presentation_representation => presentation_view
#3: if annotation_ element is a symbol_ definition	symbol_representation_ relationship	46		
#3: collection_of_ annotation_element to annotation_ element (as part)	PATH			symbol_representation_relationship <= representation_relationship_with_transformation <= representation_relationship representation_relationship.rep_1 -> symbol_representation
#3: collection_of_ annotation_element to annotation_ element (as whole)	PATH			symbol_representation_relationship <= representation_relationship_with_transformation <= representation_relationship representation_relationship.rep_2 -> symbol_representation
#4: if annotation_ element is text, curve, point, symbol, or fill area	annotation_occurrence_ relationship	46		
#4: collection_of_ annotation_element to annotation_ element (as part)	PATH			annotation_occurrence_relationship annotation_occurrence_relationship.related_annotation_occurrence -> annotation_occurrence
#4: collection_of_ annotation_element to annotation_ element (as whole)	PATH			annotation_occurrence_relationship annotation_occurrence_relationship.relating_annotation_occurrence -> annotation_occurrence

Table 27 (– Mapping table schematic_presentation_and_layout UoF (uof21)) continued

Application element	AIM element	Source	Rules	Reference path
#5: if annotation_ element is a layer	presentation_ representation_ relationship	46		
#5: collection_of_ annotation_element to annotation_ element (as part)	PATH			presentation_representation_relationship presentation_representation_relationship <= representation_relationship representation_relationship.rep_1 ->> presentation_representation <- presentation_layer_usage.presentation presentation_layer_usage presentation_layer_usage.assignment ->> presentation_layer_assignment
#5: collection_of_ annotation_element to annotation_ element (as whole)	PATH			presentation_representation_relationship presentation_representation_relationship <= representation_relationship representation_relationship.rep_2 ->> presentation_representation <- presentation_layer_usage.presentation presentation_layer_usage presentation_layer_usage.assignment ->> presentation_layer_assignment
COMPOSITION_OF_ ANNOTATION_ELEMENT #1: if composition_of_ annotation_element is a composition of layer from point, curve, etc.	presentation_layer_ assignment.assigned_items	221	6	
#1: composition_of_ annotation_element to annotation_ element (as part)	IDENTICAL MAPPING			

Table 27 (– Mapping table schematic_presentation_and_layout UoF (uof21)) continued

Application element	AIM element	Source	Rules	Reference path
#1: composition_of_ annotation_element to annotation_ element (as whole)	PATH			presentation_layer_assignment.assigned_item[i] -> layered_item = representation_item => styled_item => annotation_occurrence
#2: if composition_ of_annotation_ element is a composition of a symbol library from symbol definitions	plant_functional_symbol_ library_assignment	221		plant_functional_symbol_library_assignment <= library_assignment
#2: composition_of_ annotation_element to annotation_ element (as part)	PATH			plant_functional_symbol_library_assignment plant_functional_symbol_library_assignment.items[i] -> symbol_library_item symbol_library_item = symbol_representation symbol_representation
#2: composition_of_ annotation_element to annotation_ element (as whole)	PATH			plant_functional_symbol_library_assignment <= library_assignment library_assignment.frame_of_reference -> library_context library_context.library_reference
#3: if composition_ of_annotation_ element is a composition of text	composite_text	46		
#3: composition_of_ annotation_element to annotation_ element (as part)	PATH			composite_text <= geometric_representation_item <= representation_item => styled_item => annotation_occurrence

Table 27 (– Mapping table schematic_presentation_and_layout UoF (uof21)) continued

Application element	AIM element	Source	Rules	Reference path
#3: composition_of_ annotation_element to annotation_ element (as whole)	PATH			composite_text <= geometric_representation_item <= representation_item => styled_item => annotation_occurrence
CONNECTION_OF_ ANNOTATION_ELEMENT	annotation_occurrence_ relationship	46		{annotation_occurrence_relationship.name = 'connection'}
connection_of_ annotation_element to annotation_ element (as side_1)	PATH			annotation_occurrence_relationship annotation_occurrence_relationship.relating_annotation_occurrence annotation_occurrence
connection_of_ annotation_element to annotation_ element (as side_2)	PATH			annotation_occurrence_relationship annotation_occurrence_relationship.related_annotation_occurrence annotation_occurrence
CONNECTOR_FEATURE_OF_ ANNOTATION_ELEMENT	connector_feature_ annotation_occurrence	221		connector_feature_annotation_occurrence <= annotation_occurrence
DERIVATION_OF_ ANNOTATION_ELEMENT #1: if derivation_of_ annotation_element is a derivation of a symbol from its definition	(annotation_symbol) (defined_symbol)	46 46		
#1: derivation_of_ annotation_element to annotation_ element (as derived)	PATH			(annotation_symbol <= mapped_item <= representation_item <- styled_item.item styled_item => annotation_occurrence <= annotation_occurrence) (defined_symbol <= geometric_representation_item <= representation_item <- styled_item.item

Table 27 (– Mapping table schematic_presentation_and_layout UoF (uof21)) continued

Application element	AIM element	Source	Rules	Reference path
				styled_item => annotation_occurrence => annotation_symbol_occurrence)
#1: derivation_of_ annotation_element to annotation_ element (as source)	PATH			(annotation_symbol <= mapped_item mapped_item.mapping_source -> representation_map representation_map.representation -> representation => symbol_representation) (defined_symbol defined_symbol.definition -> defined_symbol_select defined_symbol_select = (pre_defined_symbol) (externally_defined_symbol)
#2: if derivation_ of_annotation_ element is a styling of fill area with tiles	annotation_fill_area_ occurrence	46		
#2: derivation_of_ annotation_element to annotation_ element (as derived)	IDENTICAL MAPPING			
#2: derivation_of_ annotation_element to annotation_ element (as source)	PATH			annotation_fill_area_occurrence <= annotation_occurrence <= styled_item styled_item.style[i] -> presentation_style_assignment presentation_style_assignment.styles[i] -> presentation_style_select presentation_style_select = fill_area_style fill_area_style fill_area_style.fill_styles [i] ->

Table 27 (– Mapping table schematic_presentation_and_layout UoF (uof21)) continued

Application element	AIM element	Source	Rules	Reference path
				fill_style_select fill_style_select = (pre_defined_tile_style) (externally_defined_tile_style) (fill_area_style_tiles)
#3: if derivation_ of_annotation_ element is a styling of fill area with hatching	annotation_fill_area_ occurrence	46		
#3: derivation_of_ annotation_element to annotation_ element (as derived)	IDENTICAL MAPPING			
#3: derivation_of_ annotation_element to annotation_ element (as source)	PATH			
#4: if derivation_ of_annotation_ element is a visibility of elements in view	presentation_view_with_ clipping_box			presentation_view_with_clipping_box <= presentation_view
#4: derivation_of_ annotation_element to annotation_ element (as derived)	IDENTICAL MAPPING			
#4: derivation_of_ annotation_element to annotation_ element (as source)	PATH			presentation_view_with_clipping_box <= presentation_view <= presentation_representation <= representation representation.items[i] ->> representation_item => styled_item =>

Table 27 (– Mapping table schematic_presentation_and_layout UoF (uof21)) continued

Application element	AIM element	Source	Rules	Reference path
				annotation_occurrence
#5: if derivation_ of_annotation_ element is a visibility of elements in view	presentation_view_with_ clipping_box			presentation_view_with_clipping_box <= presentation_view
#5: derivation_of_ annotation_element to annotation_ element (as derived)	IDENTICAL MAPPING			
#5: derivation_of_ annotation_element to annotation_ element (as source)	PATH			context_dependent_invisibility <= invisibility invisibility.invisible_items[i] invisible_item invisible_item = styled_item -> annotation_occurrence
DESCRIPTION_OF_ DISPLAY_BY_PLACEMENT #1: if description_of_ display_by_placement is a placement of view in a sheet	axis2_placement_2d	42		

Table 27 (– Mapping table schematic_presentation_and_layout UoF (uof21)) continued

Application element	AIM element	Source	Rules	Reference path
#1: description_of_ display_by_placement to display_of_ annotation_element_ on_physical_ information_carrier (as described) if display_of_annotation_ element_on_physical_ information_carrier is relating a view to a sheet	PATH			axis2_placement_2d <= placement <= geometric_representation_item <= representation_item <- mapped_item.mapping_target mapped_item {mapped_item.mapping_source -> representation_map representation_map.mapped_representation -> representation => presentation_representation => presentation_view} mapped_item <= representation_item <- representation.items[i] {representation => presentation_representation => presentation_area => drawing_sheet_revision}
#1: description_of_ display_by_placement to 2d_placement (as describing) if description_of_display_ by_placement is a placement of view in sheet	IDENTICAL MAPPING			
#2: if description_ of_display_by_ placement is a placement of curve in sheet	curve	42		

Table 27 (– Mapping table schematic_presentation_and_layout UoF (uof21)) continued

Application element	AIM element	Source	Rules	Reference path
#2: description_of_ display_by_placement to display_of_ annotation_element_ on_physical_ information_carrier (as described) if display_of_annotation_ element_on_physical_ information_carrier is relating a curve to a sheet	PATH			curve <= geometric_representation_item <= representation_item <- styled_item.item styled_item { => annotation_occurrence => annotation_curve_occurrence} styled_item <= representation_item representation.items[i] {representation => presentation_representation => presentation_area => drawing_sheet_revision}
#2: description_of_ display_by_placement to 2d_placement (as describing) if description_of_display_ by_placement is a placement of curve in sheet	IDENTICAL MAPPING			
#3: if description_ of_display_by_ placement is a placement of point in sheet	point	42		

Table 27 (– Mapping table schematic_presentation_and_layout UoF (uof21)) continued

Application element	AIM element	Source	Rules	Reference path
#3: description_of_ display_by_placement to display_of_ annotation_element_ on_physical_ information_carrier (as described) if display_of_annotation_ element_on_physical_ information_carrier is relating a point to a sheet	PATH			point <= geometric_representation_item <= representation_item <- styled_item.item styled_item { => annotation_occurrence => annotation_point} styled_item <= representation_item representation.items[i] {representation => presentation_representation => presentation_area => drawing_sheet_revision}
#3: description_of_ display_by_placement to 2d_placement (as describing) if description_of_display_ by_placement is a placement of point in sheet	IDENTICAL MAPPING			
#4: if description_ of_display_by_ placement is a placement of text in sheet	axis2_placement_2d	42		

Table 27 (– Mapping table schematic_presentation_and_layout UoF (uof21)) continued

Application element	AIM element	Source	Rules	Reference path
#4: description_of_ display_by_placement to display_of_ annotation_element_ on_physical_ information_carrier (as described) if display_of_annotation_ element_on_physical_ information_carrier is relating a text to a sheet	PATH			axis2_placement_2d = axis2_placement <- (text_literal.placement text_literal <= geometric_representation_item <= representation_item) (mapped_item.mapping_target mapped_item => {<= representation_item} annotation_text) representation_item <- styled_item.item styled_item { => annotation_occurrence => annotation_text_occurrence} styled_item <= representation_item representation.items[i] {representation => presentation_representation => presentation_area => drawing_sheet_revision}
#4: description_of_ display_by_placement to 2d_placement (as describing) if description_of_display_ by_placement is a placement of text in sheet	IDENTICAL MAPPING			
#5: if description_ of_display_by_ placement is a placement of fill area in sheet	curve	42		

Table 27 (– Mapping table schematic_presentation_and_layout UoF (uof21)) continued

Application element	AIM element	Source	Rules	Reference path
#5: description_of_ display_by_placement to display_of_ annotation_element_ on_physical_ information_carrier (as described) if display_of_annotation_ element_on_physical_ information_carrier is relating a fill area to a sheet	PATH			curve <- annotation_fill_area.boundaries[i] annotation_fill_area <= geometric_representation_item <= representation_item <- styled_item.item styled_item { => annotation_occurrence => annotation_fill_area_occurrence} styled_item <= representation_item representation.items[i] {representation => presentation_representation => presentation_area => drawing_sheet_revision}
#5: description_of_ display_by_placement to 2d_placement (as describing) if description_of_display_ by_placement is a placement of fill area in a sheet	IDENTICAL MAPPING			
#6: if description_ of_display_by_ placement is a placement of symbol in a sheet	placement	42		

Table 27 (– Mapping table schematic_presentation_and_layout UoF (uof21)) continued

Application element	AIM element	Source	Rules	Reference path
#6: description_of_ display_by_placement to display_of_ annotation_element_ on_physical_ information_carrier (as described) if display_of_annotation_ element_on_physical_ information_carrier is relating a symbol to a sheet	PATH			axis2_placement_2d <- {<= placement} symbol_target.placement symbol_target <= geometric_representation_item <= representation_item <- mapped_item.mapping_target mapped_item <= {=> annotation_symbol} representation_item styled_item.item styled_item { => annotation_occurrence => annotation_symbol_occurrence} styled_item <= representation_item representation.items[i] {representation => presentation_representation => presentation_area => drawing_sheet_revision}
#6: description_of_ display_by_placement to 2d_placement (as describing) if description_of_display_ by_placement is a placement of symbol in a sheet	IDENTICAL MAPPING			
DESCRIPTION_OF_ RELATIVE_PLACEMENT	(point) (axis2_placement)	42 42		

Table 27 (– Mapping table schematic_presentation_and_layout UoF (uof21)) continued

Application element	AIM element	Source	Rules	Reference path
description_of_ relative_placement to relative_ placement_of_ annotation_element (as described)	IDENTICAL MAPPING			
description_of_ relative_placement to 2d_placement (as describing)	IDENTICAL MAPPING			
DIRECTION_RANGE_FOR_ CONNECTOR_FEATURE	direction_range_for_ connector_feature	221		direction_range_for_connector_feature <= mapped_item
direction_range_for_ connector_feature to 2d_direction_range (as describing)	PATH			direction_range_for_connector_feature <= mapped_item mapped_item.mapping_source -> representation_map representation_map.mapped_representation -> representation => direction_range_representation
direction_range_for_ connector_feature to connector_feature_of_ annotation_element (as described)	PATH			direction_range_for_connector_feature <= mapped_item mapped_item.mapping_target -> representation_item => styled_item => annotation_occurrence => connector_feature_annotation_occurrence
DISPLAY_OF_ ANNOTATION_ELEMENT_ ON_PHYSICAL_ INFORMATION_CARRIER #1: if the physical_ information_carrier is drawing and annotation_ element is a sheet	drawing_sheet_revision_ usage	101		

Table 27 (– Mapping table schematic_presentation_and_layout UoF (uof21)) continued

Application element	AIM element	Source	Rules	Reference path
#1: display_of_ annotation_element_ on_physical_ information_carrier to annotation_ element (as displayed)	PATH			drawing_sheet_revision_usage <= area_in_set area_in_set.area -> presentation_area => drawing_sheet_revision
#1: display_of_ annotation_element_ on_physical_ information_carrier to physical_ information_carrier (as displayer)	PATH			drawing_sheet_revision_usage <= area_in_set area_in_set.in_set -> presentation_set => drawing_revision
#2: if the physical_ information_carrier is a sheet and annotation_element_ is text, curve, point, symbol or fill area	representation.items	41		drawing_sheet_revision <= presentation_area <= presentation_representation <= representation representation.items[i] -> representation_item => styled_item => annotation_occurrence
#2: display_of_ annotation_element_ on_physical_ information_carrier to annotation_ element (as displayed)	PATH			representation.items[i] -> representation_item => styled_item => annotation_occurrence

Table 27 (– Mapping table schematic_presentation_and_layout UoF (uof21)) continued

Application element	AIM element	Source	Rules	Reference path
#2: display_of_ annotation_element_ on_physical_ information_carrier to physical_ information_carrier (as displayer)	PATH			representation.items[i] representation => presentation_representation => presentation_area => drawing_sheet_revision
#3: if the physical_ information_carrier is a sheet and annotation_element is a view	representation.items	41		drawing_sheet_revision <= presentation_area <= presentation_representation <= representation representation.items[i] -> representation_item => mapped_item mapped_item.mapping_source -> representation_map representation_map.mapped_representation -> representation => presentation_representation => presentation_view
#3: display_of_ annotation_element_ on_physical_ information_carrier to annotation_ element (as displayed)	PATH			representation.items[i] -> representation_item => mapped_item mapped_item.mapping_source -> representation_map representation_map.mapped_representation -> representation => presentation_representation => presentation_view

Table 27 (– Mapping table schematic_presentation_and_layout UoF (uof21)) continued

Application element	AIM element	Source	Rules	Reference path
#3: display_of_ annotation_element_ on_physical_ information_carrier to physical_ information_carrier (as displayer)	PATH			representation.items[i] -> representation_item => mapped_item mapped_item.mapping_source -> representation_map representation_map.mapped_representation -> representation => presentation_representation => presentation_view
#4: if the physical_ information_carrier is a sheet and annotation_element is a layer	presentation_layer_usage	46		
#4: display_of_ annotation_element_ on_physical_ information_carrier to annotation_ element (as displayed)	PATH			presentation_layer_usage.presentation -> presentation_representation => presentation_area => drawing_sheet_revision
#4: display_of_ annotation_element_ on_physical_ information_carrier to physical_ information_carrier (as displayer)	PATH			presentation_layer_usage.assignment -> presentation_layer_assignment
INNER_BOUNDARY_FOR_ ANNOTATION_AREA	annotation_fill_area. boundaries	46		
inner_boundary_for_ annotation_area to annotation_area (as described)	IDENTICAL_MAPPING			

Table 27 (– Mapping table schematic_presentation_and_layout UoF (uof21)) continued

Application element	AIM element	Source	Rules	Reference path
inner_boundary_for_ annotation_area to 2d_curve (as describing)	PATH			annotation_fill_area.boundaries -> curve
OUTER_BOUNDARY_FOR_ ANNOTATION_AREA	annotation_fill_area. boundaries	46		
outer_boundary_for_ annotation_area to annotation_area (as described)	IDENTICAL_MAPPING			
outer_boundary_for_ annotation_area to 2d_curve (as describing)	PATH			annotation_fill_area.boundaries -> curve
PAGE_CONNECTOR #4: if annotation_element is text, curve, point, symbol, or fill area	page_connector	221		page_connector <= annotation_occurrence
PHYSICAL_INFORMATION_ CARRIER	(drawing_revision) (drawing_sheet_revision)	101 101		
POSSESSION_OF_ CONNECTOR_FEATURE_BY_ ANNOTATION_ELEMENT	possession_of_feature_ connector	221		possession_of_feature_connector <= mapped_item
possession_of_ feature_connector to annotation_element (as possessing)	PATH			possession_of_feature_connector <= mapped_item mapped_item.mapping_target -> representation_item => styled_item => annotation_occurrence

Table 27 (– Mapping table schematic_presentation_and_layout UoF (uof21)) continued

Application element	AIM element	Source	Rules	Reference path
possession_of_ connector_feature_by_ annotation_element to connector_feature_ of_annotation_ element (as possessed)	PATH			possession_of_feature_connector <= mapped_item mapped_item.mapping_target -> representation_item => styled_item => annotation_occurrence => connector_feature_annotation_occurrence
PRESENTATION_OF_ OBJECT_BY_ANNOTATION_ ELEMENT	presented_item_ representation	46		presented_item_representation {presented_item_representation.item -> presented_item => (plant_functional_presented_item) (plant_functional_presented_item_with_association)}
presentation_of_ object_by_annotation_ element to annotation_element (as presenter) #1: if annotation_element is an entire sheet #2: if annotation_element is a view #3: if annotation_element is asymbol definition #4: if annotation_element is a curve, fill area, point, symbol or text #5: if annotation_element is a layer	PATH			#1: (presented_item_representation presented_item_representation.presentation -> presentation_representation_select = presentation_set presentation_set => drawing_revision) #2: (presented_item_representation presented_item_representation.presentation -> presentation_representation_select = presentation_representation presentation_representation => presentation_view) #3: (presented_item_representation presented_item_representation.presentation -> presentation_representation_select = presentation_representation presentation_representation => presentation_area) #4: (presented_item_representation presented_item_representation.presentation -> presentation_representation_select = presentation_representation <= {=> presentation_with_association} representation

Table 27 (– Mapping table schematic_presentation_and_layout UoF (uof21)) continued

Application element	AIM element	Source	Rules	Reference path
				representation.items[i] -> representation_item => styled_item => annotation_occurrence) #5: (presented_item_representation presented_item_representation.presentation ->) presentation_representation_select = presentation_representation <- presentation_layer_usage.presentation presentation_layer_usage presentation_layer_usage.assignment presentation_layer_assignment)
presentation_of_ object_by_annotation_ element to activity (as presented)	PATH			presented_item_representation presented_item_representation.item ->) presented_item => (plant_functional_presented_item plant_functional_presented_item.items ->) (plant_functional_presented_item_with_association plant_functional_presented_item_with_association.items ->) item_for_presentation (item_for_presentation = action) (item_for_presentation = action_method)
presentation_of_ object_by_annotation_ element to beginning_ or_end_effect (as presented)	PATH			presented_item_representation presented_item_representation.item ->) presented_item => (plant_functional_presented_item plant_functional_presented_item.items ->) (plant_functional_presented_item_with_association plant_functional_presented_item_with_association.items ->) item_for_presentation (item_for_presentation = effectivity) (item_for_presentation = effectivity_assignment)

Table 27 (– Mapping table schematic_presentation_and_layout UoF (uof21)) continued

Application element	AIM element	Source	Rules	Reference path
presentation_of_ object_by_annotation_ element to connection_of_ facility (as presented)	PATH			presented_item_representation presented_item_representation.item -> presented_item => (plant_functional_presented_item plant_functional_presented_item.items ->) (plant_functional_presented_item_with_association plant_functional_presented_item_with_association.items ->) item_for_presentation item_for_presentation = connection_of_facility
presentation_of_ object_by_annotation_ element to connection_of_ material (as presented)	PATH			presented_item_representation presented_item_representation.item -> presented_item => (plant_functional_presented_item plant_functional_presented_item.items ->) (plant_functional_presented_item_with_association plant_functional_presented_item_with_association.items ->) item_for_presentation item_for_presentation = connection_of_material
presentation_of_ object_by_annotation_ element to facility (as presented) #1: if facility is a specific facility #2: if facility is a typical facility #3: if facility is a catalogue of typical facility objects	PATH			presented_item_representation presented_item_representation.item -> presented_item => (plant_functional_presented_item plant_functional_presented_item.items ->) (plant_functional_presented_item_with_association plant_functional_presented_item_with_association.items ->) item_for_presentation #1: (item_for_presentation = product_definition product_definition) #2: (item_for_presentation = product_definition product_definition) #3: (item_for_presentation = library_context library_context)

Table 27 (– Mapping table schematic_presentation_and_layout UoF (uof21)) continued

Application element	AIM element	Source	Rules	Reference path
presentation_of_ object_by_annotation_ element to feature (as presented)	PATH			presented_item_representation presented_item_representation.item -> presented_item => (plant_functional_presented_item plant_functional_presented_item.items ->) (plant_functional_presented_item_with_association plant_functional_presented_item_with_association.items ->) item_for_presentation item_for_presentation = shape_aspect
presentation_of_ object_by_annotation_ element to information_content (as presented)	PATH			presented_item_representation presented_item_representation.item -> presented_item => (plant_functional_presented_item plant_functional_presented_item.items ->) (plant_functional_presented_item_with_association plant_functional_presented_item_with_association.items ->) item_for_presentation item_for_presentation = representation
REFERENCE_BETWEEN_ PAGE_CONNECTOR	reference_between_page_ connector	221		reference_between_page_connector <= annotation_occurrence_relationship
reference_between_ page_connector to page_connector (as side_1)	PATH			reference_between_page_connector <= annotation_occurrence_relationship annotation_occurrence_relationship.relating_annotation_occurrence -> page_connector
reference_between_ page_connector to page_connector (as side_2)	PATH			reference_between_page_connector <= annotation_occurrence_relationship annotation_occurrence_relationship.related_annotation_occurrence -> page_connector

Table 27 (– Mapping table schematic_presentation_and_layout UoF (uof21)) continued

Application element	AIM element	Source	Rules	Reference path
RELATIVE_PLACEMENT_ OF_ANNOTATION_ ELEMENT #1: if relative_placement_ of_annotation_element is a placement of curve, point, text, fill area or symbol in a view	representation.items	41		
#1: relative_ placement_of_ annotation_element to annotation_ element (as placed)	PATH			representation.items[i] representation => presentation_representation => presentation_view
#1: relative_ placement_of_ annotation_element toannotation_element (as referenced)	PATH			representation.items[i] representation => presentation_representation => presentation_view
#2: if relative_ placement_of_ annotation_element is a placement of curve, point, text, fill area or symbol in a symbol definition	representation.items	41		

Table 27 (– Mapping table schematic_presentation_and_layout UoF (uof21)) continued

Application element	AIM element	Source	Rules	Reference path
#2: relative_ placement_of_ annotation_element to annotation_ element (as placed)	PATH			representation.items[i] representation => symbol_definition
#2: relative_ placement_of_ annotation_element to annotation_ element (as referenced)	PATH			representation.items[i] representation => symbol_definition
#3: if relative_ placement_of_ annotation_element is a placement of curve, point, text, fill area or symbol to another curve, point, text, fill area or symbol in the same sheet, view or symbol definition	representation	41		
#3: relative_ placement_of_ annotation_element to annotation_ element (as placed)	PATH			representation representation.items[i] -> representation_item => styled_item => annotation_occurrence -> (annotation_curve_occurrence) (annotation_symbol_occurrence) (annotation_text_occurrence) (annotation_symbol_occurrence) (annotation_fill_area_occurrence)

Table 27 (– Mapping table schematic_presentation_and_layout UoF (uof21)) concluded

Application element	AIM element	Source	Rules	Reference path
#3: relative_ placement_of_ annotation_element to annotation_ element (as referenced)	PATH			representation representation.items[i] ->> representation_item => styled_item => annotation_occurrence -> (annotation_curve_occurrence) (annotation_symbol_occurrence) (annotation_text_occurrence) (annotation_symbol_occurrence) (annotation_fill_area_occurrence)

Table 28 – Mapping table variance_and_derivation UoF (uof22)

Application element	AIM element	Source	Rules	Reference path
ALTERNATIVE_ ASSOCIATION_BETWEEN_ OBJECTS #1: if alternative_ association_between_objects relates two activity objects	product_definition_ alternative	221		{product_definition_alternative <= action_relationship action_relationship.name = 'alternative'}
#1: alternative_ association_between_ objects to activity object (as alternative_1)	PATH			product_definition_alternative <= action_relationship action_relationship.relating_action -> (action) (action action.chosen_action -> action_method)
#1: alternative_ association_between_ objects to activity object (as alternative_2)	PATH			product_definition_alternative <= action_relationship action_relationship.relating_action -> (action) (action action.chosen_action -> action_method)
#2: if alternative_ association_between_ objects relates two approval_of_objects	product_definition_ alternative	221		{product_definition_alternative <= approval_relationship approval_relationship.name = 'alternative'}
#2: alternative_ association_between_ objects to approval_ of_object (as alternative_1)	PATH			product_definition_alternative <= approval_relationship approval_relationship.relating_approval -> approval <- approval.assignment.assigned_approval approval_assignment => plant_functional_approval_assignment

Table 28 (– Mapping table variance_and_derivation UoF (uof22)) continued

Application element	AIM element	Source	Rules	Reference path
#2: alternative_ association_between_ objects to approval_ of_object (as alternative_2)	PATH			product_definition_alternative <= approval_relationship approval_relationship.relating_approval -> approval <- approval.assignment.assigned_approval approval_assignment => plant_functional_approval_assignment
#3: if alternative_ association_between_ objects relates two beginning_or_end_ effects objects	product_definition_ alternative	221		{product_definition_alternative <= product_definition_relationship product_definition_relationship.name = 'alternative'}
#3: alternative_ association_between_ objects to beginning_ or_end_effect object (as alternative_1)	PATH			(product_definition_alternative <= product_definition_relationship <- product_definition_effectivity.usage product_definition_effectivity <= effectivity => process_or_process_relationship_effectivity) (product_definition_alternative <= product_definition_relationship <- product_definition_effectivity.usage product_definition_effectivity <= effectivity <- effectivity_assignment.assigned_effectivity effectivity_assignment => plant_functional_effectivity_assignment)
#3: alternative_ association_between_ objects to beginning_ or_end_effect object (as alternative_2)	PATH			(product_definition_alternative <= product_definition_relationship <- product_definition_effectivity.usage product_definition_effectivity <= effectivity => process_or_process_relationship_effectivity) (product_definition_alternative <= product_definition_relationship <-

Table 28 (– Mapping table variance_and_derivation UoF (uof22)) continued

Application element	AIM element	Source	Rules	Reference path
				product_definition_effectivity.usage product_definition_effectivity <= effectivity <- effectivity_assignment.assigned_effectivity effectivity_assignment => plant_functional_effectivity_assignment)
#4: if alternative_ association_between_ objects relates two class_of_activity objects	product_definition_ alternative	221		{product_definition_alternative <= group_relationship group_relationship.name = 'alternative'}
#4: alternative_ association_between_ objects to class_of_ activity object (as alternative_1)	PATH			product_definition_alternative <= group_relationship group_relationship.relating_group -> group <= class_of_activity
#4: alternative_ association_between_ objects to class_of_ activity object (as alternative_2)	PATH			product_definition_alternative <= group_relationship group_relationship.relating_group -> group <= class_of_activity
#5: if alternative_ association_between_ objects relates two class_of_information_ content objects	product_definition_ alternative	221		({product_definition_alternative <= representation_relationship representation_relationship.name = 'alternative'}) ({product_definition_alternative <= group_relationship group_relationship.name = 'alternative'})
#5: alternative_ association_between_ objects to class_of_ information_content object (as alternative_1)	PATH			(product_definition_alternative <= representation_relationship representation_relationship.rep_1 -> representation representation.representation_context -> representation_context => class_of_information_content) (product_definition_alternative <= group_relationship

Table 28 (– Mapping table variance_and_derivation UoF (uof22)) continued

Application element	AIM element	Source	Rules	Reference path
				group_relationship.relating_group -> group <- group_assignment.assigned_group group_assignment => document_type)
#5: alternative_ association_between_ objects to class_of_ information_content object (as alternative_2)	PATH			(product_definition_alternative <= representation_relationship representation_relationship.rep_1 -> representation representation.representation_context -> representation_context => class_of_information_content) (product_definition_alternative <= group_relationship group_relationship.relating_group -> group <- group_assignment.assigned_group group_assignment => document_type)
#6: if alternative_ association_between_ objects relates two class_of_facility objects	product_definition_ alternative	221		{product_definition_alternative <= product_category_relationship product_category_relationship.name = 'alternative'}
#6: alternative_ association_between_ objects to class_of_ facility object (as alternative_1)	PATH			product_definition_alternative <= product_category_relationship product_category_relationship.category -> product_category => class_of_facility
#6: alternative_ association_between_ objects to class_of_ facility object (as alternative_2)	PATH			product_definition_alternative <= product_category_relationship product_category_relationship.category -> product_category => class_of_facility

Table 28 (– Mapping table variance_and_derivation UoF (uof22)) continued

Application element	AIM element	Source	Rules	Reference path
#7: if alternative_ association_between_ objects relates two class_of_material objects	product_definition_ alternative	221		{product_definition_alternative <= product_category_relationship product_category_relationship.name = 'alternative'}
#7: alternative_ association_between_ objects to class_of_ material object (as alternative_1)	PATH			product_definition_alternative <= product_category_relationship product_category_relationship.category -> product_category => class_of_material
#7: alternative_ association_between_ objects to class_of_ material object (as alternative_2)	PATH			product_definition_alternative <= product_category_relationship product_category_relationship.category -> product_category => class_of_material
#8: if alternative_ association_between_ objects relates two class_of_property objects	product_definition_ alternative	221		{product_definition_alternative <= group_relationship group_relationship.name = 'alternative'}
#8: alternative_ association_between_ objects to class_of_ property object (as alternative_1)	PATH			product_definition_alternative <= group_relationship group_relationship.relating_group -> group <= class_of_property
#8: alternative_ association_between_ objects to class_of_ property object (as alternative_2)	PATH			product_definition_alternative <= group_relationship group_relationship.relating_group -> group <= class_of_property
#9: if alternative_ association_between_ objects relates two classification_of_ activity objects	product_definition_ alternative	221		{ product_definition_alternative <= group_relationship group_relationship.name = 'alternative'}

Table 28 (– Mapping table variance_and_derivation UoF (uof22)) continued

Application element	AIM element	Source	Rules	Reference path
#9: alternative_ association_between_ objects to classification_of_ activity object (as alternative_1)	PATH			product_definition_alternative <= group_relationship group_relationship.relating_group -> group <- group_assignment.assigned_group group_assignment => plant_functional_class_of_activity_assignment)
#9: alternative_ association_between_ objects to classification_of_ activity object (as alternative_2)	PATH			product_definition_alternative <= group_relationship group_relationship.relating_group -> group <- group_assignment.assigned_group group_assignment => plant_functional_class_of_activity_assignment)
#10: if alternative_ association_between_ objects relates two classification_of_ information_content objects	product_definition_ alternative	221		{ product_definition_alternative <= group_relationship group_relationship.name = 'alternative'}
#10: alternative_ association_between_ objects to classification_of_ information_content object (as alternative_1)	PATH			product_definition_alternative <= group_relationship group_relationship.relating_group group <- group_assignment.assigned_group group_assignment => plant_functional_class_of_information_content_assignment)
#10: alternative_ association_between_ objects to classification_of_ information_content object (as alternative_2)	PATH			product_definition_alternative <= group_relationship group_relationship.relating_group group <- group_assignment.assigned_group group_assignment => plant_functional_class_of_information_content_assignment)

Table 28 (– Mapping table variance_and_derivation UoF (uof22)) continued

Application element	AIM element	Source	Rules	Reference path
#11: if alternative_ association_between_ objects relates two classification_of_ facility objects	product_definition_ alternative	221		{ product_definition_alternative <= product_category_relationship product_category_relationship.name = 'alternative'}
#11: alternative_ association_between_ objects to classification_of_ facility object (as alternative_1)	PATH			product_definition_alternative <= product_category_relationship product_category_relationship.category -> product_category => product_related_product_category => classification_of_facility)
#11: alternative_ association_between_ objects to classification_of_ facility object (as alternative_2)	PATH			product_definition_alternative <= product_category_relationship product_category_relationship.category -> product_category => product_related_product_category => classification_of_facility)
#12: if alternative_ association_between_ objects relates two classification_of_ material objects	product_definition_ alternative	221		{ product_definition_alternative <= product_category_relationship product_category_relationship.name = 'alternative'}
#12: alternative_ association_between_ objects to classification_of_ material object (as alternative_1)	PATH			product_definition_alternative <= product_category_relationship product_category_relationship.category -> product_category => product_related_product_category => classification_of_material)
#12: alternative_ association_between_ objects to classification_of_ material object (as alternative_2)	PATH			product_definition_alternative <= product_category_relationship product_category_relationship.category -> product_category => product_related_product_category => classification_of_material)

Table 28 (– Mapping table variance_and_derivation UoF (uof22)) continued

Application element	AIM element	Source	Rules	Reference path
#13: if alternative_ association_between_ objects relates two classification_of_ property objects	product_definition_ alternative	221		{ product_definition_alternative <= group_relationship group_relationship.name = 'alternative'}
#13: alternative_ association_between_ objects to classification_of_ property object (as alternative_1)	PATH			product_definition_alternative <= group_relationship group_relationship.relating_group -> group <- group_assignment.assigned_group group_assignment => plant_functional_property_classification_assignment)
#13: alternative_ association_between_ objects to classification_of_ property object (as alternative_2)	PATH			product_definition_alternative <= group_relationship group_relationship.relating_group -> group <- group_assignment.assigned_group group_assignment => plant_functional_property_classification_assignment)
#14: if alternative_ association_between_ objects relates two composition_of_ facility objects	assembly_component_usage_ substitute	44		{ assembly_component_usage_substitute assembly_component_usage_substitute.name = 'alternative'}
#14: alternative_ association_between_ objects to composition_of_ facility object (as alternative_1)	PATH			(assembly_component_usage_substitute assembly_component_usage_substitute.base -> assembly_component_usage <= assembly_of_facility) (assembly_component_usage_substitute assembly_component_usage_substitute.base -> assembly_component_usage <= product_definition_usage <= collection_of_facility))

Table 28 (– Mapping table variance_and_derivation UoF (uof22)) continued

Application element	AIM element	Source	Rules	Reference path
#14: alternative_ association_between_ objects to composition_of_ facility object (as alternative_2)	PATH			(assembly_component_usage_substitute assembly_component_usage_substitute.base -> assembly_component_usage <= assembly_of_facility) (assembly_component_usage_substitute assembly_component_usage_substitute.base -> assembly_component_usage <= product_definition_usage <= collection_of_facility))
#15: if alternative_ association_between_ objects relates two composition_of_ material objects	assembly_component_usage_ substitute	44		{ assembly_component_usage_substitute assembly_component_usage_substitute.name = 'alternative'}
#15: alternative_ association_between_ objects to composition_of_ material object (as alternative_1)	PATH			(assembly_component_usage_substitute assembly_component_usage_substitute.base -> assembly_component_usage <= assembly_of_material) (assembly_component_usage_substitute assembly_component_usage_substitute.base -> assembly_component_usage <= product_definition_usage <= collection_of_material))
#15: alternative_ association_between_ objects to composition_of_ material object (as alternative_2)	PATH			(assembly_component_usage_substitute assembly_component_usage_substitute.base -> assembly_component_usage <= assembly_of_material) (assembly_component_usage_substitute assembly_component_usage_substitute.base -> assembly_component_usage <= product_definition_usage <= collection_of_material))

Table 28 (– Mapping table variance_and_derivation UoF (uof22)) continued

Application element	AIM element	Source	Rules	Reference path
#16: if alternative_ association_between_ objects relates two connection_of_ facility objects	product_definition_ alternative	221		product_definition_alternative <= [product_definition] [product_definition_relationship] {product_definition_relationship.name = 'alternative'}
#16: alternative_ association_between_ objects to connection_of_ facility object (as alternative_1)	PATH			product_definition_alternative <= product_definition_relationship product_definition_relationship.relating_product_definition -> product_definition => connection_of_facility
#16: alternative_ association_between_ objects to connection_of_ facility object (as alternative_2)	PATH			product_definition_alternative <= product_definition_relationship product_definition_relationship.relating_product_definition -> product_definition => connection_of_facility
#17: if alternative_ association_between_ objects relates two connection_of_ material objects	product_definition_ alternative	221		{ product_definition_alternative <= [product_definition] [product_definition_relationship] {product_definition_relationship.name = 'alternative'}
#17: alternative_ association_between_ objects to connection_of_ material object (as alternative_1)	PATH			product_definition_alternative <= product_definition_relationship product_definition_relationship.relating_product_definition -> product_definition => connection_of_material
#17: alternative_ association_between_ objects to connection_of_ material object (as alternative_2)	PATH			product_definition_alternative <= product_definition_relationship product_definition_relationship.relating_product_definition -> product_definition => connection_of_material

Table 28 (– Mapping table variance_and_derivation UoF (uof22)) continued

Application element	AIM element	Source	Rules	Reference path
#18: if alternative_ association_between_ objects relates two description_of_ object_by_ information_content objects	product_definition_ alternative	221		({product_definition_alternative <= representation_relationship representation_relationship.name = 'alternative'}) ({product_definition_alternative <= document_relationship document_relationship.name = 'alternative'})
#18: alternative_ association_between_ objects to description_of_ object_by_ information_content object (as alternative_1)	PATH			(product_definition_alternative <= representation_relationship representation_relationship.rep_1 -> representation <- property_definition_representation.used_representation property_definition_representation property_definition_representation.definition -> property_definition) (product_definition_alternative <= document_relationship document_relationship.relating_document -> document <- document_reference.assigned_document document_reference <= plant_functional_information_content_description_assignment))
#18: alternative_ association_between_ objects to description_of_ object_by_ information_content object (as alternative_2)	PATH			(product_definition_alternative <= representation_relationship representation_relationship.rep_1 -> representation <- property_definition_representation.used_representation property_definition_representation property_definition_representation.definition -> property_definition) (product_definition_alternative <= document_relationship document_relationship.relating_document -> document <- document_reference.assigned_document document_reference <=

Table 28 (– Mapping table variance_and_derivation UoF (uof22)) continued

Application element	AIM element	Source	Rules	Reference path
				plant_functional_information_content_description_assignment))
#19: if alternative_ association_between_ objects relates two description_of_ object_via_ information_carrier objects	product_definition_ alternative	221		{ product_definition_alternative <= document_relationship document_relationship.name = 'alternative'}
#19: alternative_ association_between_ objects to description_of_ object_via_ information_carrier object (as alternative_1)	PATH			product_definition_alternative <= document_relationship document_relationship.relating_document -> document <- document_reference.assigned_document document_reference <= plant_functional_information_carrier_description_assignment)
#19: alternative_ association_between_ objects to description_of_ object_via_ information_carrier object (as alternative_2)	PATH			product_definition_alternative <= document_relationship document_relationship.relating_document -> document <- document_reference.assigned_document document_reference <= plant_functional_information_carrier_description_assignment)
#20: if alternative_ association_between_ objects relates two facility objects	product_definition_ alternative	221		{ product_definition_alternative <= product_definition_relationship product_definition_relationship.name = 'alternative'}
#20: alternative_ association_between_ objects to facility object (as alternative_1)	PATH			product_definition_alternative <= product_definition_relationship product_definition_relationship.relating_product_definition -> product_definition)

Table 28 (– Mapping table variance_and_derivation UoF (uof22)) continued

Application element	AIM element	Source	Rules	Reference path
#20: alternative_ association_between_ objects to facility object (as alternative_2)	PATH			product_definition_alternative <= product_definition_relationship product_definition_relationship.relating_product_definition -> product_definition)
#21: if alternative_ association_between_ objects relates two feature objects	product_definition_ alternative	221		{ product_definition_alternative <= shape_aspect_relationship shape_aspect_relationship.name = 'alternative'}
#21: alternative_ association_between_ objects to feature object (as alternative_1)	PATH			product_definition_alternative <= shape_aspect_relationship shape_aspect_relationship.relating_shape_aspect -> shape_aspect)
#21: alternative_ association_between_ objects to feature object (as alternative_2)	PATH			product_definition_alternative <= shape_aspect_relationship shape_aspect_relationship.relating_shape_aspect -> shape_aspect)
#22: if alternative_ association_between_ objects relates two information_content objects	representation_alternative	221		({representation_alternative <= representation_relationship representation_relationship.name = 'alternative'}) (product_definition_alternative <= document_relationship document_relationship.name = 'alternative'}))
#22: alternative_ association_between_ objects to information_content object (as alternative_1)	PATH			(representation_alternative <= representation_relationship representation_relationship.rep_1 -> representation) (product_definition_alternative <= document_relationship document_relationship.relating_document -> document))

Table 28 (– Mapping table variance_and_derivation UoF (uof22)) continued

Application element	AIM element	Source	Rules	Reference path
#22: alternative_ association_between_ objects to information_content object (as alternative_2)	PATH			(representation_alternative <= representation_relationship representation_relationship.rep_1 -> representation) (product_definition_alternative <= document_relationship document_relationship.relating_document -> document))
#23: if alternative_ association_between_ objects relates two material objects	product_definition_ alternative	221		{ product_definition_alternative <= product_definition_relationship product_definition_relationship.name = 'alternative'}
#23: alternative_ association_between_ objects to material object (as alternative_1)	PATH			product_definition_alternative <= product_definition_relationship product_definition_relationship.relating_product_definition -> product_definition)
#23: alternative_ association_between_ objects to material object (as alternative_2)	PATH			product_definition_alternative <= product_definition_relationship product_definition_relationship.relating_product_definition -> product_definition)
#24: if alternative_ association_between_ objects relates two organization objects	product_definition_ alternative	221		{ product_definition_alternative <= organization_relationship organization_relationship.name = 'alternative'}
#24: alternative_ association_between_ objects to organization object (as alternative_1)	PATH			product_definition_alternative <= organization_relationship organization_relationship.relating_organization organization)

Table 28 (– Mapping table variance_and_derivation UoF (uof22)) continued

Application element	AIM element	Source	Rules	Reference path
#24: alternative_ association_between_ objects to organization object (as alternative_2)	PATH			product_definition_alternative <= organization_relationship organization_relationship.relating_organization organization)
#25: if alternative_ association_between_ objects relates two person objects	product_definition_ alternative	221		{ product_definition_alternative <= organization_relationship organization_relationship.name = 'alternative'}
#25: alternative_ association_between_ objects to person object (as alternative_1)	PATH			product_definition_alternative <= organization_relationship organization_relationship.relating_organization organization <- person_and_organization.the_organization person_and_organization person_and_organization.the_person -> person)
#25: alternative_ association_between_ objects to person object (as alternative_2)	PATH			product_definition_alternative <= organization_relationship organization_relationship.relating_organization organization <- person_and_organization.the_organization person_and_organization person_and_organization.the_person -> person)
#26: if alternative_ association_between_ objects relates two possession_of_ property_by_member_ of_collection objects	product_definition_ alternative	221		{ product_definition_alternative <= representation_relationship representation_relationship.name = 'alternative'}

Table 28 (– Mapping table variance_and_derivation UoF (uof22)) continued

Application element	AIM element	Source	Rules	Reference path
#26: alternative_ association_between_ objects to possession_of_ property_by_member_ of_collection object (as alternative_1)	PATH			product_definition_alternative <= representation_relationship representation_relationship.relating_relationship -> relationship <- property_definition_representation.used_representation property_definition_representation property_definition_representation.definition -> property_definition property_definition.definition)
#26: alternative_ association_between_ objects to possession_of_ property_by_member_ of_collection object (as alternative_2)	PATH			product_definition_alternative <= representation_relationship representation_relationship.relating_relationship -> relationship <- property_definition_representation.used_representation property_definition_representation property_definition_representation.definition -> property_definition property_definition.definition)
#27: if alternative_ association_between_ objects relates two possession_of_ property_by_object objects	product_definition_ alternative	221		({product_definition_alternative <= action_property_relationship action_property_relationship.name = 'alternative'}) ({product_definition_alternative <= representation_relationship representation_relationship.name = 'alternative'}) ({product_definition_alternative <= representation_relationship representation_relationship.name = 'alternative'}) ({product_definition_alternative <= representation_relationship representation_relationship.name = 'alternative'}

Table 28 (– Mapping table variance_and_derivation UoF (uof22)) continued

Application element	AIM element	Source	Rules	Reference path
#27: alternative_ association_between_ objects to possession_of_ property_by_object object (as alternative_1)	PATH			(product_definition_alternative <= action_property_relationship action_property_relationship.relating_action_property -> action_property) (product_definition_alternative <= representation_relationship representation_relationship.relating_relationship -> relationship <- property_definition_representation.used_representation property_definition_representation property_definition_representation.definition -> property_definition => property_by_member) (product_definition_alternative <= representation_relationship representation_relationship.relating_relationship -> relationship <- property_definition_representation.used_representation property_definition_representation property_definition_representation.definition -> property_definition property_definition.definition) (product_definition_alternative <= representation_relationship representation_relationship.relating_relationship -> relationship <- property_definition_representation.used_representation property_definition_representation property_definition_representation.definition -> property_definition => property_by_member)

Table 28 (– Mapping table variance_and_derivation UoF (uof22)) continued

Application element	AIM element	Source	Rules	Reference path
#27: alternative_ association_between_ objects to possession_of_ property_by_object object (as alternative_2)	PATH			(product_definition_alternative <= action_property_relationship action_property_relationship.relating_action_property -> action_property) (product_definition_alternative <= representation_relationship representation_relationship.relating_relationship -> relationship <- property_definition_representation.used_representation property_definition_representation property_definition_representation.definition -> property_definition => property_by_member) (product_definition_alternative <= representation_relationship representation_relationship.relating_relationship -> relationship <- property_definition_representation.used_representation property_definition_representation property_definition_representation.definition -> property_definition property_definition.definition) (product_definition_alternative <= representation_relationship representation_relationship.relating_relationship -> relationship <- property_definition_representation.used_representation property_definition_representation property_definition_representation.definition -> property_definition => property_by_member)
#28: if alternative_ association_between_ objects relates two property objects	property_definition_ alternative	221		{property_definition_alternative <= property_definition_relationship property_definition_relationship.name = 'alternative'}

Table 28 (– Mapping table variance_and_derivation UoF (uof22)) continued

Application element	AIM element	Source	Rules	Reference path
#28: alternative_ association_between_ objects to property object (as alternative_1)	PATH			property_definition_alternative <= property_definition_relationship property_definition_relationship.relating_property_definition -> property_definition
#28: alternative_ association_between_ objects to property object (as alternative_2)	PATH			property_definition_alternative <= property_definition_relationship property_definition_relationship.relating_property_definition -> property_definition
#29: if alternative_ association_between_ objects relates two provision_of_service_ by_material objects	product_definition_ alternative	221		product_definition_alternative <= [product_definition] [product_definition_relationship] {product_definition_relationship.name = 'alternative'}
#29: alternative_ association_between_ objects to provision_ of_service_by_ material object (as alternative_1)	PATH			product_definition_alternative <= product_definition_relationship product_definition_relationship.relating_product_definition -> product_definition => provision_of_service
#29: alternative_ association_between_ objects to provision_ of_service_by_ material object (as alternative_2)	PATH			product_definition_alternative <= product_definition_relationship product_definition_relationship.relating_product_definition -> product_definition => provision_of_service
#30: if alternative_ association_between_ objects to recognized_class_of_ resource_for_ material objects	product_definition_ alternative	221		{product_definition_alternative <= product_category_relationship product_category_relationship.name = 'alternative'}

Table 28 (– Mapping table variance_and_derivation UoF (uof22)) continued

Application element	AIM element	Source	Rules	Reference path
#30: alternative_ association_between_ objects to recognized_class_of_ resource_for_ material object (as alternative_1)	PATH			product_definition_alternative <= product_category_relationship product_category_relationship.category -> product_category => product_related_product_category => recognized_class_of_resource
#30: alternative_ association_between_ objects to recognized_class_of_ resource_for_ material object (as alternative_2)	PATH			product_definition_alternative <= product_category_relationship product_category_relationship.category -> product_category => product_related_product_category => recognized_class_of_resource
#31: if alternative_ association_between_ objects to recognized_class_of_ service_for_facility objects	product_definition_ alternative	221		{product_definition_alternative <= product_category_relationship product_category_relationship.name = 'alternative'}
#31: alternative_ association_between_ objects to recognized_class_of_ service_for_facility object (as alternative_1)	PATH			product_definition_alternative <= product_category_relationship product_category_relationship.category -> product_category => product_related_product_category => recognized_class_of_service
#31: alternative_ association_between_ objects to recognized_class_of_ service_for_facility object (as alternative_2)	PATH			product_definition_alternative <= product_category_relationship product_category_relationship.category -> product_category => product_related_product_category => recognized_class_of_service

Table 28 (– Mapping table variance_and_derivation UoF (uof22)) continued

Application element	AIM element	Source	Rules	Reference path
DERIVATIVE_ ASSOCIATION_BETWEEN_ OBJECTS #1: if derivative_ association_between_objects relates two activity objects	product_definition_ derivation	221		{product_definition_derivation <= action_relationship action_relationship.name = 'derivative'}
#1: derivative_ association_between_ objects to activity object (as source)	PATH			product_definition_derivation <= action_relationship action_relationship.relating_action -> (action) (action action.chosen_action -> action_method)
#1: derivative_ association_between_ objects to activity object (as derivative)	PATH			product_definition_derivation <= action_relationship action_relationship.relating_action -> (action) (action action.chosen_action -> action_method)
#2: if derivative_ association_between_ objects relates two approval_of_objects	product_definition_ derivation	221		{product_definition_derivation <= approval_relationship approval_relationship.name = 'derivative'}
#2: derivative_ association_between_ objects to approval_ of_object (as source)	PATH			product_definition_derivation <= approval_relationship approval_relationship.relating_approval -> approval <- approval.assignment.assigned_approval approval_assignment => plant_functional_approval_assignment

Table 28 (– Mapping table variance_and_derivation UoF (uof22)) continued

Application element	AIM element	Source	Rules	Reference path
#2: derivative_ association_between_ objects to approval_ of_object (as derivative)	PATH			product_definition_derivation <= approval_relationship approval_relationship.relating_approval -> approval <- approval.assignment.assigned_approval approval_assignment => plant_functional_approval_assignment
#3: if derivative_ association_between_ objects relates two beginning_or_end_ effects objects	product_definition_ derivation	221		{product_definition_derivation <= product_definition_relationship product_definition_relationship.name = 'derivative'}
#3: derivative_ association_between_ objects to beginning_ or_end_effect object (as source)	PATH			(product_definition_derivation <= product_definition_relationship <- product_definition_effectivity.usage product_definition_effectivity <= effectivity => process_or_process_relationship_effectivity) (product_definition_derivation <= product_definition_relationship <- product_definition_effectivity.usage product_definition_effectivity <= effectivity <- effectivity_assignment.assigned_effectivity effectivity_assignment => plant_functional_effectivity_assignment)
#3: derivative_ association_between_ objects to beginning_ or_end_effect object (as derivative)	PATH			(product_definition_derivation <= product_definition_relationship <- product_definition_effectivity.usage product_definition_effectivity <= effectivity => process_or_process_relationship_effectivity) (product_definition_derivation <= product_definition_relationship <-

Table 28 (– Mapping table variance_and_derivation UoF (uof22)) continued

Application element	AIM element	Source	Rules	Reference path
				product_definition_effectivity.usage product_definition_effectivity <= effectivity <- effectivity_assignment.assigned_effectivity effectivity_assignment => plant_functional_effectivity_assignment)
#4: if derivative_ association_between_ objects relates two class_of_activity objects	product_definition_ derivation	221		{product_definition_derivation <= group_relationship group_relationship.name = 'derivative'}
#4: derivative_ association_between_ objects to class_of_ activity object (as source)	PATH			product_definition_derivation <= group_relationship group_relationship.relating_group -> group <= class_of_activity
#4: derivative_ association_between_ objects to class_of_ activity object (as derivative)	PATH			product_definition_derivation <= group_relationship group_relationship.relating_group -> group <= class_of_activity
#5: if derivative_ association_between_ objects relates two class_of_information_ content objects	product_definition_ derivation	221		({product_definition_derivation <= representation_relationship representation_relationship.name = 'derivative'}) ({product_definition_derivation <= group_relationship group_relationship.name = 'derivative'})
#5: derivative_ association_between_ objects to class_of_ information_content object (as source)	PATH			(product_definition_derivation <= representation_relationship representation_relationship.rep_1 -> representation representation.representation_context -> representation_context => class_of_information_content) (product_definition_derivation <= group_relationship

Table 28 (– Mapping table variance_and_derivation UoF (uof22)) continued

Application element	AIM element	Source	Rules	Reference path
				group_relationship.relating_group -> group <- group_assignment.assigned_group group_assignment => document_type)
#5: derivative_ association_between_ objects to class_of_ information_content object (as derivative)	PATH			(product_definition_derivation <= representation_relationship representation_relationship.rep_1 -> representation representation.representation_context -> representation_context => class_of_information_content) (product_definition_derivation <= group_relationship group_relationship.relating_group -> group <- group_assignment.assigned_group group_assignment => document_type)
#6: if derivative_ association_between_ objects relates two class_of_facility objects	product_definition_ derivation	221		{product_definition_derivation <= product_category_relationship product_category_relationship.name = 'derivative'}
#6: derivative_ association_between_ objects to class_of_ facility object (as source)	PATH			product_definition_derivation <= product_category_relationship product_category_relationship.category -> product_category => class_of_facility
#6: derivative_ association_between_ objects to class_of_ facility object (as derivative)	PATH			product_definition_derivation <= product_category_relationship product_category_relationship.category -> product_category => class_of_facility

Table 28 (– Mapping table variance_and_derivation UoF (uof22)) continued

Application element	AIM element	Source	Rules	Reference path
#7: if derivative_ association_between_ objects relates two class_of_material objects	product_definition_ derivation	221		{product_definition_derivation <= product_category_relationship product_category_relationship.name = 'derivative'}
#7: derivative_ association_between_ objects to class_of_ material object (as source)	PATH			product_definition_derivation <= product_category_relationship product_category_relationship.category -> product_category => class_of_material
#7: derivative_ association_between_ objects to class_of_ material object (as derivative)	PATH			product_definition_derivation <= product_category_relationship product_category_relationship.category -> product_category => class_of_material
#8: if derivative_ association_between_ objects relates two class_of_property objects	product_definition_ derivation	221		{product_definition_derivation <= group_relationship group_relationship.name = 'derivative'}
derivative_ association_between_ objects to class_of_ property object (as source)	PATH			product_definition_derivation <= group_relationship group_relationship.relating_group -> group <= class_of_property)
derivative_ association_between_ objects to class_of_ property object (as derivative)	PATH			product_definition_derivation <= group_relationship group_relationship.relating_group -> group <= class_of_property)
#9: if derivative_ association_between_ objects relates two classification_of_ activity objects	product_definition_ derivation	221		{ product_definition_derivation <= group_relationship group_relationship.name = 'derivative'}

Table 28 (– Mapping table variance_and_derivation UoF (uof22)) continued

Application element	AIM element	Source	Rules	Reference path
derivative_ association_between_ objects to classification_of_ activity object (as source)	PATH			product_definition_derivation <= group_relationship group_relationship.relating_group -> group <- group_assignment.assigned_group group_assignment => plant_functional_class_of_activity_assignment)
derivative_ association_between_ objects to classification_of_ activity object (as derivative)	PATH			product_definition_derivation <= group_relationship group_relationship.relating_group -> group <- group_assignment.assigned_group group_assignment => plant_functional_class_of_activity_assignment)
#10: if derivative_ association_between_ objects relates two classification_of_ information_content objects	product_definition_ derivation	221		{ product_definition_derivation <= group_relationship group_relationship.name = 'derivative'}
#10: derivative_ association_between_ objects to classification_of_ information_content object (as source)	PATH			product_definition_derivation <= group_relationship group_relationship.relating_group group <- group_assignment.assigned_group group_assignment => plant_functional_class_of_information_content_assignment
#10: derivative_ association_between_ objects to classification_of_ information_content object (as derivative)	PATH			product_definition_derivation <= group_relationship group_relationship.relating_group group <- group_assignment.assigned_group group_assignment => plant_functional_class_of_information_content_assignment

Table 28 (– Mapping table variance_and_derivation UoF (uof22)) continued

Application element	AIM element	Source	Rules	Reference path
#11: if derivative_ association_between_ objects relates two classification_of_ facility objects	product_definition_ derivation	221		{product_definition_derivation <= product_category_relationship product_category_relationship.name = 'derivative'}
derivative_ association_between_ objects to classification_of_ facility object (as source)	PATH			product_definition_derivation <= product_category_relationship product_category_relationship.category -> product_category => product_related_product_category => classification_of_facility
derivative_ association_between_ objects to classification_of_ facility object (as derivative)	PATH			product_definition_derivation <= product_category_relationship product_category_relationship.category -> product_category => product_related_product_category => classification_of_facility
#12: if derivative_ association_between_ objects relates two classification_of_ material objects	product_definition_ derivation	221		{product_definition_derivation <= product_category_relationship product_category_relationship.name = 'derivative'}
#12: derivative_ association_between_ objects to classification_of_ material object (as source)	PATH			product_definition_derivation <= product_category_relationship product_category_relationship.category -> product_category => product_related_product_category => classification_of_material
#12: derivative_ association_between_ objects to classification_of_ material object (as derivative)	PATH			product_definition_derivation <= product_category_relationship product_category_relationship.category -> product_category => product_related_product_category => classification_of_material

Table 28 (– Mapping table variance_and_derivation UoF (uof22)) continued

Application element	AIM element	Source	Rules	Reference path
#13: if derivative_ association_between_ objects relates two classification_of_ property objects	product_definition_ derivation	221		{product_definition_derivation <= group_relationship group_relationship.name = 'derivative'}
#13: derivative_ association_between_ objects to classification_of_ property object (as source)	PATH			product_definition_derivation <= group_relationship group_relationship.relating_group -> group <- group_assignment.assigned_group group_assignment => plant_functional_property_classification_assignment
#13: derivative_ association_between_ objects to classification_of_ property object (as derivative)	PATH			product_definition_derivation <= group_relationship group_relationship.relating_group -> group <- group_assignment.assigned_group group_assignment => plant_functional_property_classification_assignment
#14: if derivative_ association_between_ objects relates two composition_of_ facility objects	assembly_component_usage_ substitute	44		{assembly_component_usage_substitute assembly_component_usage_substitute.name = 'derivative'}
#14: derivative_ association_between_ objects to composition_of_ facility object (as source)	PATH			(assembly_component_usage_substitute assembly_component_usage_substitute.base -> assembly_component_usage <= assembly_of_facility) (assembly_component_usage_substitute assembly_component_usage_substitute.base -> assembly_component_usage <= product_definition_usage <= collection_of_facility)

Table 28 (– Mapping table variance_and_derivation UoF (uof22)) continued

Application element	AIM element	Source	Rules	Reference path
#14: derivative_ association_between_ objects to composition_of_ facility object (as derivative)	PATH			(assembly_component_usage_substitute assembly_component_usage_substitute.base -> assembly_component_usage <= assembly_of_facility) (assembly_component_usage_substitute assembly_component_usage_substitute.base -> assembly_component_usage <= product_definition_usage <= collection_of_facility)
#15: if derivative_ association_between_ objects relates two composition_of_ material objects	assembly_component_usage_ substitute	44		{assembly_component_usage_substitute assembly_component_usage_substitute.name = 'derivative'}
#15: derivative_ association_between_ objects to composition_of_ material object (as source)	PATH			(assembly_component_usage_substitute assembly_component_usage_substitute.base -> assembly_component_usage <= assembly_of_material) (assembly_component_usage_substitute assembly_component_usage_substitute.base -> assembly_component_usage <= product_definition_usage <= collection_of_material)
#15: derivative_ association_between_ objects to composition_of_ material object (as derivative)	PATH			(assembly_component_usage_substitute assembly_component_usage_substitute.base -> assembly_component_usage <= assembly_of_material) (assembly_component_usage_substitute assembly_component_usage_substitute.base -> assembly_component_usage <= product_definition_usage <= collection_of_material)

Table 28 (– Mapping table variance_and_derivation UoF (uof22)) continued

Application element	AIM element	Source	Rules	Reference path
#16: if derivative_ association_between_ objects relates two connection_of_ facility objects	product_definition_ derivation	221		product_definition_derivation <= [product_definition] [product_definition_relationship] {product_definition_relationship.name = 'derivative'}
derivative_ association_between_ objects to connection_of_ facility object (as source)	PATH			product_definition_derivation <= product_definition_relationship product_definition_relationship.relating_product_definition -> product_definition => connection_of_facility
#16: derivative_ association_between_ objects to connection_of_ facility object (as derivative)	PATH			product_definition_derivation <= product_definition_relationship product_definition_relationship.relating_product_definition -> product_definition => connection_of_facility
#17: if derivative_ association_between_ objects relates two connection_of_ material objects	product_definition_ derivation	221		product_definition_derivation <= product_definition product_definition_relationship {product_definition_relationship.name = 'derivative'}
#17: derivative_ association_between_ objects to connection_of_ material object (as source)	PATH			product_definition_derivation <= product_definition_relationship product_definition_relationship.relating_product_definition -> product_definition => connection_of_material
#17: derivative_ association_between_ objects to connection_of_ material object (as derivative)	PATH			product_definition_derivation <= product_definition_relationship product_definition_relationship.relating_product_definition -> product_definition => connection_of_material

Table 28 (– Mapping table variance_and_derivation UoF (uof22)) continued

Application element	AIM element	Source	Rules	Reference path
#18: if derivative_ association_between_ objects relates two description_of_ object_by_ information_content objects	product_definition_ derivation	221		({product_definition_derivation <= representation_relationship representation_relationship.name = 'derivative'}) ({product_definition_derivation <= document_relationship document_relationship.name = 'derivative'})
#18: derivative_ association_between_ objects to description_of_ object_by_ information_content object (as source)	PATH			(product_definition_derivation <= representation_relationship representation_relationship.rep_1 -> representation <- property_definition_representation.used_representation property_definition_representation property_definition_representation.definition -> property_definition) (product_definition_derivation <= document_relationship document_relationship.relating_document -> document <- document_reference.assigned_document document_reference <= plant_functional_information_content_description_assignment)
#18: derivative_ association_between_ objects to description_of_ object_by_ information_content object (as derivative)	PATH			(product_definition_derivation <= representation_relationship representation_relationship.rep_1 -> representation <- property_definition_representation.used_representation property_definition_representation property_definition_representation.definition -> property_definition) (product_definition_derivation <= document_relationship document_relationship.relating_document -> document <- document_reference.assigned_document document_reference <=

Table 28 (– Mapping table variance_and_derivation UoF (uof22)) continued

Application element	AIM element	Source	Rules	Reference path
				plant_functional_information_content_description_assignment)
#19: if derivative_ association_between_ objects relates two description_of_ object_via_ information_carrier objects	product_definition_ derivation	221		{product_definition_derivation <= document_relationship document_relationship.name = 'derivative'}
#19: derivative_ association_between_ objects to description_of_ object_via_ information_carrier object (as source)	PATH			product_definition_derivation <= document_relationship document_relationship.relating_document -> document <- document_reference.assigned_document document_reference <= plant_functional_information_carrier_description_assignment
#19: derivative_ association_between_ objects to description_of_ object_via_ information_carrier object (as derivative)	PATH			product_definition_derivation <= document_relationship document_relationship.relating_document -> document <- document_reference.assigned_document document_reference <= plant_functional_information_carrier_description_assignment
#20: if derivative_ association_between_ objects relates two facility objects	product_definition_ derivation	221		{product_definition_derivation <= product_definition_relationship product_definition_relationship.name = 'derivative'}
#20: derivative_ association_between_ objects to facility object (as source)	PATH			product_definition_derivation <= product_definition_relationship product_definition_relationship.relating_product_definition -> product_definition

Table 28 (– Mapping table variance_and_derivation UoF (uof22)) continued

Application element	AIM element	Source	Rules	Reference path
#20: derivative_ association_between_ objects to facility object (as derivative)	PATH			product_definition_derivation <= product_definition_relationship product_definition_relationship.relating_product_definition -> product_definition
#21: if derivative_ association_between_ objects relates two feature objects	product_definition_ derivation	221		{product_definition_derivation <= shape_aspect_relationship shape_aspect_relationship.name = 'derivative'}
#21: erivative_ association_between_ objects to feature object (as source)	PATH			product_definition_derivation <= shape_aspect_relationship shape_aspect_relationship.relating_shape_aspect -> shape_aspect
#21: derivative_ association_between_ objects to feature object (as derivative)	PATH			product_definition_derivation <= shape_aspect_relationship shape_aspect_relationship.relating_shape_aspect -> shape_aspect
#22: if derivative_ association_between_ objects relates two information_content objects	(representation_derivative	221		({representation_derivative <= representation_relationship representation_relationship.name = 'derivative'}) ({product_definition_derivation <= document_relationship document_relationship.name = 'derivative'})
#22: derivative_ association_between_ objects to information_content object (as source)	PATH			(representation_derivative <= representation_relationship representation_relationship.rep_1 -> representation) (product_definition_derivation <= document_relationship document_relationship.relating_document -> document)

Table 28 (– Mapping table variance_and_derivation UoF (uof22)) continued

Application element	AIM element	Source	Rules	Reference path
#22: derivative_ association_between_ objects to information_content object (as derivative)	PATH			(representation_derivative <= representation_relationship representation_relationship.rep_1 -> representation) (product_definition_derivation <= document_relationship document_relationship.relating_document -> document)
#23: if derivative_ association_between_ objects relates two material objects	product_definition_ derivation	221		{product_definition_derivation <= product_definition_relationship product_definition_relationship.name = 'derivative'}
#23: derivative_ association_between_ objects to material object (as source)	PATH			product_definition_derivation <= product_definition_relationship product_definition_relationship.relating_product_definition -> product_definition
#23: derivative_ association_between_ objects to material object (as derivative)	PATH			product_definition_derivation <= product_definition_relationship product_definition_relationship.relating_product_definition -> product_definition
#24: if derivative_ association_between_ objects relates two organization objects	product_definition_ derivation	221		{product_definition_derivation <= organization_relationship organization_relationship.name = 'derivative'}
#24: derivative_ association_between_ objects to organization object (as source)	PATH			product_definition_derivation <= organization_relationship organization_relationship.relating_organization organization

Table 28 (– Mapping table variance_and_derivation UoF (uof22)) continued

Application element	AIM element	Source	Rules	Reference path
#24: derivative_ association_between_ objects to organization object (as derivative)	PATH			product_definition_derivation <= organization_relationship organization_relationship.relating_organization organization
#25: if derivative_ association_between_ objects relates two person objects	product_definition_ derivation	221		{product_definition_derivation <= organization_relationship organization_relationship.name = 'derivative'}
#25: derivative_ association_between_ objects to person object (as source)	PATH			product_definition_derivation <= organization_relationship organization_relationship.relating_organization organization <- person_and_organization.the_organization person_and_organization person_and_organization.the_person -> person
#25: derivative_ association_between_ objects to person object (as derivative)	PATH			product_definition_derivation <= organization_relationship organization_relationship.relating_organization organization <- person_and_organization.the_organization person_and_organization person_and_organization.the_person -> person
#26: if derivative_ association_between_ objects relates two possession_of_ property_by_member_ of_collection objects	product_definition_ derivation	221		{product_definition_derivation <= representation_relationship representation_relationship.name = 'derivative'}

Table 28 (– Mapping table variance_and_derivation UoF (uof22)) continued

Application element	AIM element	Source	Rules	Reference path
#26: derivative_ association_between_ objects to possession_of_ property_by_member_ of_collection object (as source)	PATH			product_definition_derivation <= representation_relationship representation_relationship.relating_relationship -> relationship <- property_definition_representation.used_representation property_definition_representation property_definition_representation.definition -> property_definition property_definition.definition
#26: derivative_ association_between_ objects to possession_of_ property_by_member_ of_collection object (as derivative)	PATH			product_definition_derivation <= representation_relationship representation_relationship.relating_relationship -> relationship <- property_definition_representation.used_representation property_definition_representation property_definition_representation.definition -> property_definition property_definition.definition
#27: if derivative_ association_between_ objects relates two possession_of_ property_by_object objects	product_definition_ derivation	221		({product_definition_derivation <= action_property_relationship action_property_relationship.name = 'derivative'}) ({product_definition_derivation <= representation_relationship representation_relationship.name = 'derivative'}) ({product_definition_derivation <= representation_relationship representation_relationship.name = 'derivative'}) ({product_definition_derivation <= representation_relationship representation_relationship.name = 'derivative'})

Table 28 (– Mapping table variance_and_derivation UoF (uof22)) continued

Application element	AIM element	Source	Rules	Reference path
#27: derivative_ association_between_ objects to possession_of_ property_by_object object (as source)	PATH			(product_definition_derivation <= action_property_relationship action_property_relationship.relating_action_property -> action_property) (product_definition_derivation <= representation_relationship representation_relationship.relating_relationship -> relationship <- property_definition_representation.used_representation property_definition_representation property_definition_representation.definition -> property_definition => property_by_member) (product_definition_derivation <= representation_relationship representation_relationship.relating_relationship -> relationship <- property_definition_representation.used_representation property_definition_representation property_definition_representation.definition -> property_definition property_definition.definition) (product_definition_derivation <= representation_relationship representation_relationship.relating_relationship -> relationship <- property_definition_representation.used_representation property_definition_representation property_definition_representation.definition -> property_definition => property_by_member)

Table 28 (– Mapping table variance_and_derivation UoF (uof22)) continued

Application element	AIM element	Source	Rules	Reference path
#27: derivative_ association_between_ objects to possession_of_ property_by_object object (as derivative)	PATH			(product_definition_derivation <= action_property_relationship action_property_relationship.relating_action_property -> action_property) (product_definition_derivation <= representation_relationship representation_relationship.relating_relationship -> relationship <- property_definition_representation.used_representation property_definition_representation property_definition_representation.definition -> property_definition => property_by_member) (product_definition_derivation <= representation_relationship representation_relationship.relating_relationship -> relationship <- property_definition_representation.used_representation property_definition_representation property_definition_representation.definition -> property_definition property_definition.definition) (product_definition_derivation <= representation_relationship representation_relationship.relating_relationship -> relationship <- property_definition_representation.used_representation property_definition_representation property_definition_representation.definition -> property_definition => property_by_member)
#28: if derivative_ association_between_ objects relates two property objects	property_definition_ derivation	221		{property_definition_derivation <= property_definition_relationship property_definition_relationship.name = 'derivative'}

Table 28 (– Mapping table variance_and_derivation UoF (uof22)) continued

Application element	AIM element	Source	Rules	Reference path
#28: derivative_ association_between_ objects to property object (as source)	PATH			property_definition_derivation <= property_definition_relationship property_definition_relationship.relating_property_definition -> property_definition
#28: derivative_ association_between_ objects to property object (as derivative)	PATH			property_definition_derivation <= property_definition_relationship property_definition_relationship.relating_property_definition -> property_definition
#29: if derivative_ association_between_ objects relates two provision_of_service_ by_material objects	product_definition_ derivation	221		product_definition_derivation <= [product_definition] [product_definition_relationship] {product_definition_relationship.name = 'derivative'}
#29: derivative_ association_between_ objects to provision_ of_service_by_ material object (as source)	PATH			product_definition_derivation <= product_definition_relationship product_definition_relationship.relating_product_definition -> product_definition => provision_of_service
#29: derivative_ association_between_ objects to provision_ of_service_by_ material object (as derivative)	PATH			product_definition_derivation <= product_definition_relationship product_definition_relationship.relating_product_definition -> product_definition => provision_of_service
#30: if derivative_ association_between_ objects to recognized_class_of_ resource_for_ material objects	product_definition_ derivation	221		{product_definition_derivation <= product_category_relationship product_category_relationship.name = 'derivative'}

Table 28 (– Mapping table variance_and_derivation UoF (uof22)) continued

Application element	AIM element	Source	Rules	Reference path
#30: derivative_ association_between_ objects to recognized_class_of_ resource_for_ material object (as source)	PATH			product_definition_derivation <= product_category_relationship product_category_relationship.category -> product_category => product_related_product_category => recognized_class_of_resource
#30: derivative_ association_between_ objects to recognized_class_of_ resource_for_ material object (as derivative)	PATH			product_definition_derivation <= product_category_relationship product_category_relationship.category -> product_category => product_related_product_category => recognized_class_of_resource
#31: if derivative_ association_between_ objects to recognized_class_of_ service_for_facility objects	product_definition_ derivation	221		{product_definition_derivation <= product_category_relationship product_category_relationship.name = 'derivative'}
#31: derivative_ association_between_ objects to recognized_class_of_ service_for_facility object (as source)	PATH			product_definition_derivation <= product_category_relationship product_category_relationship.category -> product_category => product_related_product_category => recognized_class_of_service
#31: derivative_ association_between_ objects to recognized_class_of_ service_for_facility object (as derivative)	PATH			product_definition_derivation <= product_category_relationship product_category_relationship.category -> product_category => product_related_product_category => recognized_class_of_service

Table 28 (– Mapping table variance_and_derivation UoF (uof22)) continued

Application element	AIM element	Source	Rules	Reference path
VERSION_ASSOCIATION_ BETWEEN_OBJECTS #1: if version_association_ between_objects relates two activity objects	product_definition_version	221		{product_definition_version <= action_relationship action_relationship.name = 'variance'}
#1: version_ association_between_ objects to activity object (as predecessor)	PATH			product_definition_version <= action_relationship action_relationship.relating_action -> (action) (action action.chosen_action -> action_method)
#1: version_ association_between_ objects to activity object (as successor)	PATH			product_definition_version <= action_relationship action_relationship.relating_action -> (action) (action action.chosen_action -> action_method)
#2: if version_ association_between_ objects relates two approval_of_objects	product_definition_version	221		{product_definition_version <= approval_relationship approval_relationship.name = 'variance'}
#2: version_ association_between_ objects to approval_ of_object (as predecessor)	PATH			product_definition_version <= approval_relationship approval_relationship.relating_approval -> approval <- approval.assignment.assigned_approval approval_assignment => plant_functional_approval_assignment
#2: version_ association_between_ objects to approval_ of_object (as successor)	PATH			product_definition_version <= approval_relationship approval_relationship.relating_approval -> approval <- approval.assignment.assigned_approval approval_assignment =>

Table 28 (– Mapping table variance_and_derivation UoF (uof22)) continued

Application element	AIM element	Source	Rules	Reference path
				plant_functional_approval_assignment
#3: if version_ association_between_ objects relates two beginning_or_end_ effects objects	product_definition_version	221		{product_definition_version <= product_definition_relationship product_definition_relationship.name = 'variance'}
#3: version_ association_between_ objects to beginning_ or_end_effect object (as predecessor)	PATH			(product_definition_version <= product_definition_relationship <- product_definition_effectivity.usage product_definition_effectivity <= effectivity => process_or_process_relationship_effectivity) (product_definition_version <= product_definition_relationship <- product_definition_effectivity.usage product_definition_effectivity <= effectivity <- effectivity_assignment.assigned_effectivity effectivity_assignment => plant_functional_effectivity_assignment)
#3: version_ association_between_ objects to beginning_ or_end_effect object (as successor)	PATH			(product_definition_version <= product_definition_relationship <- product_definition_effectivity.usage product_definition_effectivity <= effectivity => process_or_process_relationship_effectivity) (product_definition_version <= product_definition_relationship <- product_definition_effectivity.usage product_definition_effectivity <= effectivity <- effectivity_assignment.assigned_effectivity effectivity_assignment => plant_functional_effectivity_assignment)

Table 28 (– Mapping table variance_and_derivation UoF (uof22)) continued

Application element	AIM element	Source	Rules	Reference path
#4: if version_ association_between_ objects relates two class_of_activity objects	product_definition_version	221		{product_definition_version <= group_relationship group_relationship.name = 'variance'}
#4: version_ association_between_ objects to class_of_ activity object (as predecessor)	PATH			product_definition_version <= group_relationship group_relationship.relating_group -> group <= class_of_activity
#4: version_ association_between_ objects to class_of_ activity object (as successor)	PATH			product_definition_version <= group_relationship group_relationship.relating_group -> group <= class_of_activity
#5: if version_ association_between_ objects relates two class_of_information_ content objects	product_definition_version	221		({product_definition_version <= representation_relationship representation_relationship.name = 'variance'}) ({product_definition_version <= group_relationship group_relationship.name = 'variance'})
#5: version_ association_between_ objects to class_of_ information_content object (as predecessor)	PATH			(product_definition_version <= representation_relationship representation_relationship.rep_1 -> representation representation.representation_context -> representation_context => class_of_information_content) (product_definition_version <= group_relationship group_relationship.relating_group -> group <- group_assignment.assigned_group group_assignment => document_type)

Table 28 (– Mapping table variance_and_derivation UoF (uof22)) continued

Application element	AIM element	Source	Rules	Reference path
#5: version_ association_between_ objects to class_of_ information_content object (as successor)	PATH			(product_definition_version <= representation_relationship representation_relationship.rep_1 -> representation representation.representation_context -> representation_context => class_of_information_content) (product_definition_version <= group_relationship group_relationship.relating_group -> group <- group_assignment.assigned_group group_assignment => document_type)
#6: if version_ association_between_ objects relates two class_of_facility objects	product_definition_version	221		{product_definition_version <= product_category_relationship product_category_relationship.name = 'variance'}
#6: version_ association_between_ objects to class_of_ facility object (as predecessor)	PATH			product_definition_version <= product_category_relationship product_category_relationship.category -> product_category => class_of_facility
#6: version_ association_between_ objects to class_of_ facility object (as successor)	PATH			product_definition_version <= product_category_relationship product_category_relationship.category -> product_category => class_of_facility
#7: if version_ association_between_ objects relates two class_of_material objects	product_definition_version	221		{product_definition_version <= product_category_relationship product_category_relationship.name = 'variance'}

Table 28 (– Mapping table variance_and_derivation UoF (uof22)) continued

Application element	AIM element	Source	Rules	Reference path
#7: version_ association_between_ objects to class_of_ material object (as predecessor)	PATH			product_definition_version <= product_category_relationship product_category_relationship.category -> product_category => class_of_material
#7: version_ association_between_ objects to class_of_ material object (as successor)	PATH			product_definition_version <= product_category_relationship product_category_relationship.category -> product_category => class_of_material
#8: if version_ association_between_ objects relates two class_of_property objects	product_definition_version	221		{product_definition_version <= group_relationship group_relationship.name = 'variance'}
#8: version_ association_between_ objects to class_of_ property object (as predecessor)	PATH			product_definition_version <= group_relationship group_relationship.relating_group -> group <= class_of_property
#8: version_ association_between_ objects to class_of_ property object (as successor)	PATH			product_definition_version <= group_relationship group_relationship.relating_group -> group <= class_of_property
#9: if version_ association_between_ objects relates two classification_of_ activity objects	product_definition_version	221		{product_definition_version <= group_relationship group_relationship.name = 'variance'}

Table 28 (– Mapping table variance_and_derivation UoF (uof22)) continued

Application element	AIM element	Source	Rules	Reference path
#9: version_ association_between_ objects to classification_of_ activity object (as predecessor)	PATH			product_definition_version <= group_relationship group_relationship.relating_group -> group <- group_assignment.assigned_group group_assignment => plant_functional_class_of_activity_assignment
#9: version_ association_between_ objects to classification_of_ activity object (as successor)	PATH			product_definition_version <= group_relationship group_relationship.relating_group -> group <- group_assignment.assigned_group group_assignment => plant_functional_class_of_activity_assignment
#10: if version_ association_between_ objects relates two classification_of_ information_content objects	product_definition_version	221		{product_definition_version <= group_relationship group_relationship.name = 'variance'}
#10: version_ association_between_ objects to classification_of_ information_content object (as predecessor)	PATH			product_definition_version <= group_relationship group_relationship.relating_group group <- group_assignment.assigned_group group_assignment => plant_functional_class_of_information_content_assignment
#10: version_ association_between_ objects to classification_of_ information_content object (as successor)	PATH			product_definition_version <= group_relationship group_relationship.relating_group group <- group_assignment.assigned_group group_assignment => plant_functional_class_of_information_content_assignment

Table 28 (– Mapping table variance_and_derivation UoF (uof22)) continued

Application element	AIM element	Source	Rules	Reference path
#11: if version_ association_between_ objects relates two classification_of_ facility objects	product_definition_version	221		{product_definition_version <= product_category_relationship product_category_relationship.name = 'variance'}
#11: version_ association_between_ objects to classification_of_ facility object (as predecessor)	PATH			product_definition_version <= product_category_relationship product_category_relationship.category -> product_category => product_related_product_category => classification_of_facility
#11: version_ association_between_ objects to classification_of_ facility object (as successor)	PATH			product_definition_version <= product_category_relationship product_category_relationship.category -> product_category => product_related_product_category => classification_of_facility
#12: if version_ association_between_ objects relates two classification_of_ material objects	product_definition_version	221		{product_definition_version <= product_category_relationship product_category_relationship.name = 'variance'}
#12: version_ association_between_ objects to classification_of_ material object (as predecessor)	PATH			product_definition_version <= product_category_relationship product_category_relationship.category -> product_category => product_related_product_category => classification_of_material
#12: version_ association_between_ objects to classification_of_ material object (as successor)	PATH			product_definition_version <= product_category_relationship product_category_relationship.category -> product_category => product_related_product_category => classification_of_material

Table 28 (– Mapping table variance_and_derivation UoF (uof22)) continued

Application element	AIM element	Source	Rules	Reference path
#13: if version_ association_between_ objects relates two classification_of_ property objects	product_definition_version	221		{product_definition_version <= group_relationship group_relationship.name = 'variance'}
#13: version_ association_between_ objects to classification_of_ property object (as predecessor)	PATH			product_definition_version <= group_relationship group_relationship.relating_group -> group <- group_assignment.assigned_group group_assignment => plant_functional_property_classification_assignment
#13: version_ association_between_ objects to classification_of_ property object (as successor)	PATH			product_definition_version <= group_relationship group_relationship.relating_group -> group <- group_assignment.assigned_group group_assignment => plant_functional_property_classification_assignment
#14: if version_ association_between_ objects relates two composition_of_ facility objects	assembly_component_usage_ substitute	44		{assembly_component_usage_substitute assembly_component_usage_substitute.name = 'variance'}
#14: version_ association_between_ objects to composition_of_ facility object (as predecessor)	PATH			(assembly_component_usage_substitute assembly_component_usage_substitute.base -> assembly_component_usage <= assembly_of_facility) (assembly_component_usage_substitute assembly_component_usage_substitute.base -> assembly_component_usage <= product_definition_usage <= collection_of_facility)

Table 28 (– Mapping table variance_and_derivation UoF (uof22)) continued

Application element	AIM element	Source	Rules	Reference path
#14: version_ association_between_ objects to composition_of_ facility object (as successor)	PATH			(assembly_component_usage_substitute assembly_component_usage_substitute.base -> assembly_component_usage <= assembly_of_facility) (assembly_component_usage_substitute assembly_component_usage_substitute.base -> assembly_component_usage <= product_definition_usage <= collection_of_facility)
#15: if version_ association_between_ objects relates two composition_of_ material objects	assembly_component_usage_ substitute	44		{assembly_component_usage_substitute assembly_component_usage_substitute.name = 'variance'}
#15: version_ association_between_ objects to composition_of_ material object (as predecessor)	PATH			(assembly_component_usage_substitute assembly_component_usage_substitute.base -> assembly_component_usage <= assembly_of_material) (assembly_component_usage_substitute assembly_component_usage_substitute.base -> assembly_component_usage <= product_definition_usage <= collection_of_material)
#15: version_ association_between_ objects to composition_of_ material object (as successor)	PATH			(assembly_component_usage_substitute assembly_component_usage_substitute.base -> assembly_component_usage <= assembly_of_material) (assembly_component_usage_substitute assembly_component_usage_substitute.base -> assembly_component_usage <= product_definition_usage <= collection_of_material)

Table 28 (– Mapping table variance_and_derivation UoF (uof22)) continued

Application element	AIM element	Source	Rules	Reference path
#16: if version_ association_between_ objects relates two connection_of_ facility objects	product_definition_version	221		product_definition_version <= [product_definition] [product_definition_relationship] {product_definition_relationship.name = 'variance'}
#16: version_ association_between_ objects to connection_of_ facility object (as predecessor)	PATH			product_definition_version <= product_definition_relationship product_definition_relationship.relating_product_definition -> product_definition => connection_of_facility
#16: version_ association_between_ objects to connection_of_ facility object (as successor)	PATH			product_definition_version <= product_definition_relationship product_definition_relationship.relating_product_definition -> product_definition => connection_of_facility
#17: if version_ association_between_ objects relates two connection_of_ material objects	product_definition_version	221		product_definition_version <= [product_definition] [product_definition_relationship] {product_definition_relationship.name = 'variance'}
#17: version_ association_between_ objects to connection_of_ material object (as predecessor)	PATH			product_definition_version <= product_definition_relationship product_definition_relationship.relating_product_definition -> product_definition => connection_of_material
#17: version_ association_between_ objects to connection_of_ material object (as successor)	PATH			product_definition_version <= product_definition_relationship product_definition_relationship.relating_product_definition -> product_definition => connection_of_material

Table 28 (– Mapping table variance_and_derivation UoF (uof22)) continued

Application element	AIM element	Source	Rules	Reference path
#18: if version_ association_between_ objects relates two description_of_ object_by_ information_content objects	product_definition_version	221		({product_definition_version <= representation_relationship representation_relationship.name = 'variance'}) ({product_definition_version <= document_relationship document_relationship.name = 'variance'})
#18: version_ association_between_ objects to description_of_ object_by_ information_content object (as predecessor)	PATH			(product_definition_version <= representation_relationship representation_relationship.rep_1 -> representation <- property_definition_representation.used_representation property_definition_representation property_definition_representation.definition -> property_definition) (product_definition_version <= document_relationship document_relationship.relating_document -> document <- document_reference.assigned_document document_reference <= plant_functional_information_content_description_assignment)
#18: version_ association_between_ objects to description_of_ object_by_ information_content object (as successor)	PATH			(product_definition_version <= representation_relationship representation_relationship.rep_1 -> representation <- property_definition_representation.used_representation property_definition_representation property_definition_representation.definition -> property_definition) (product_definition_version <= document_relationship document_relationship.relating_document -> document <- document_reference.assigned_document document_reference <=

Table 28 (– Mapping table variance_and_derivation UoF (uof22)) continued

Application element	AIM element	Source	Rules	Reference path
				plant_functional_information_content_description_assignment)
#19: if version_ association_between_ objects relates two description_of_ object_via_ information_carrier objects	product_definition_version	221		{product_definition_version <= document_relationship document_relationship.name = 'variance'}
#19: version_ association_between_ objects to description_of_ object_via_ information_carrier object (as predecessor)	PATH			product_definition_version <= document_relationship document_relationship.relating_document -> document <- document_reference.assigned_document document_reference <= plant_functional_information_carrier_description_assignment
#19: version_ association_between_ objects to description_of_ object_via_ information_carrier object (as successor)	PATH			product_definition_version <= document_relationship document_relationship.relating_document -> document <- document_reference.assigned_document document_reference <= plant_functional_information_carrier_description_assignment
#20: if version_ association_between_ objects relates two facility objects	product_definition_version	221		{product_definition_version <= product_definition_relationship product_definition_relationship.name = 'variance'}
#20: version_ association_between_ objects to facility object (as predecessor)	PATH			product_definition_version <= product_definition_relationship product_definition_relationship.relating_product_definition -> product_definition

Table 28 (– Mapping table variance_and_derivation UoF (uof22)) continued

Application element	AIM element	Source	Rules	Reference path
#20: version_ association_between_ objects to facility object (as successor)	PATH			product_definition_version <= product_definition_relationship product_definition_relationship.relating_product_definition -> product_definition
#21: if version_ association_between_ objects relates two feature objects	product_definition_version	221		{product_definition_version <= shape_aspect_relationship shape_aspect_relationship.name = 'variance'}
#21: version_ association_between_ objects to feature object (as predecessor)	PATH			product_definition_version <= shape_aspect_relationship shape_aspect_relationship.relating_shape_aspect -> shape_aspect
#21: version_ association_between_ objects to feature object (as successor)	PATH			product_definition_version <= shape_aspect_relationship shape_aspect_relationship.relating_shape_aspect -> shape_aspect
#22: if version_ association_between_ objects relates two information_content objects	representation_version	221		({representation_version <= representation_relationship representation_relationship.name = 'variance'}) ({product_definition_version <= document_relationship document_relationship.name = 'variance'})
#22: version_ association_between_ objects to information_content object (as predecessor)	PATH			(representation_version <= representation_relationship representation_relationship.rep_1 -> representation) (product_definition_version <= document_relationship document_relationship.relating_document -> document)

Table 28 (– Mapping table variance_and_derivation UoF (uof22)) continued

Application element	AIM element	Source	Rules	Reference path
#22: version_ association_between_ objects to information_content object (as successor)	PATH			(representation_version <= representation_relationship representation_relationship.rep_1 -> representation) (product_definition_version <= document_relationship document_relationship.relating_document -> document)
#23: if version_ association_between_ objects relates two material objects	product_definition_version	221		{product_definition_version <= product_definition_relationship product_definition_relationship.name = 'variance'}
#23 : version_ association_between_ objects to material object (as predecessor)	PATH			product_definition_version <= product_definition_relationship product_definition_relationship.relating_product_definition -> product_definition
#23 : version_ association_between_ objects to material object (as successor)	PATH			product_definition_version <= product_definition_relationship product_definition_relationship.relating_product_definition -> product_definition
#24: if version_ association_between_ objects relates two organization objects	product_definition_version	221		{product_definition_version <= organization_relationship organization_relationship.name = 'variance'}
#24 : version_ association_between_ objects to organization object (as predecessor)	PATH			product_definition_version <= organization_relationship organization_relationship.relating_organization organization

Table 28 (– Mapping table variance_and_derivation UoF (uof22)) continued

Application element	AIM element	Source	Rules	Reference path
#24 : version_ association_between_ objects to organization object (as successor)	PATH			product_definition_version <= organization_relationship organization_relationship.relating_organization organization
#25: if version_ association_between_ objects relates two person objects	product_definition_version	221		{product_definition_version <= organization_relationship organization_relationship.name = 'variance'}
#25 : version_ association_between_ objects to person object (as predecessor)	PATH			product_definition_version <= organization_relationship organization_relationship.relating_organization organization <- person_and_organization.the_organization person_and_organization person_and_organization.the_person -> person
#25 : version_ association_between_ objects to person object (as successor)	PATH			product_definition_version <= organization_relationship organization_relationship.relating_organization organization <- person_and_organization.the_organization person_and_organization person_and_organization.the_person -> person
#26: if version_ association_between_ objects relates two possession_of_ property_by_member_ of_collection objects	product_definition_version	221		{product_definition_version <= representation_relationship representation_relationship.name = 'variance'}

Table 28 (– Mapping table variance_and_derivation UoF (uof22)) continued

Application element	AIM element	Source	Rules	Reference path
#26 : version_ association_between_ objects to possession_of_ property_by_member_ of_collection object (as predecessor)	PATH			product_definition_version <= representation_relationship representation_relationship.relating_relationship -> relationship <- property_definition_representation.used_representation property_definition_representation property_definition_representation.definition -> property_definition property_definition.definition
#26 : version_ association_between_ objects to possession_of_ property_by_member_ of_collection object (as successor)	PATH			product_definition_version <= representation_relationship representation_relationship.relating_relationship -> relationship <- property_definition_representation.used_representation property_definition_representation property_definition_representation.definition -> property_definition property_definition.definition
#27: if version_ association_between_ objects relates two possession_of_ property_by_object objects	product_definition_version	221		({product_definition_version <= action_property_relationship action_property_relationship.name = 'variance'}) ({product_definition_version <= representation_relationship representation_relationship.name = 'variance'}) ({product_definition_version <= representation_relationship representation_relationship.name = 'variance'}) ({product_definition_version <= representation_relationship representation_relationship.name = 'variance'})

Table 28 (– Mapping table variance_and_derivation UoF (uof22)) continued

Application element	AIM element	Source	Rules	Reference path
#27 : version_ association_between_ objects to possession_of_ property_by_object object (as predecessor)	PATH			(product_definition_version <= action_property_relationship action_property_relationship.relating_action_property -> action_property) (product_definition_version <= representation_relationship representation_relationship.relating_relationship -> relationship <- property_definition_representation.used_representation property_definition_representation property_definition_representation.definition -> property_definition => property_by_member) (product_definition_version <= representation_relationship representation_relationship.relating_relationship -> relationship <- property_definition_representation.used_representation property_definition_representation property_definition_representation.definition -> property_definition property_definition.definition) (product_definition_version <= representation_relationship representation_relationship.relating_relationship -> relationship <- property_definition_representation.used_representation property_definition_representation property_definition_representation.definition -> property_definition => property_by_member)

Table 28 (– Mapping table variance_and_derivation UoF (uof22)) continued

Application element	AIM element	Source	Rules	Reference path
#27 : version_ association_between_ objects to possession_of_ property_by_object object (as successor)	PATH			(product_definition_version <= action_property_relationship action_property_relationship.relating_action_property -> action_property) (product_definition_version <= representation_relationship representation_relationship.relating_relationship -> relationship <- property_definition_representation.used_representation property_definition_representation property_definition_representation.definition -> property_definition => property_by_member) (product_definition_version <= representation_relationship representation_relationship.relating_relationship -> relationship <- property_definition_representation.used_representation property_definition_representation property_definition_representation.definition -> property_definition property_definition.definition) (product_definition_version <= representation_relationship representation_relationship.relating_relationship -> relationship <- property_definition_representation.used_representation property_definition_representation property_definition_representation.definition -> property_definition => property_by_member)
#28: if version_ association_between_ objects relates two property objects	property_definition_ version	221		{property_definition_version <= property_definition_relationship property_definition_relationship.name = 'variance'}

Table 28 (– Mapping table variance_and_derivation UoF (uof22)) continued

Application element	AIM element	Source	Rules	Reference path
#28 : version_ association_between_ objects to property object (as predecessor)	PATH			property_definition_version <= property_definition_relationship property_definition_relationship.relating_property_definition -> property_definition
#28 : version_ association_between_ objects to property object (as successor)	PATH			property_definition_version <= property_definition_relationship property_definition_relationship.relating_property_definition -> property_definition
#29: if version_ association_between_ objects relates two provision_of_service_ by_material objects	product_definition_version	221		product_definition_version <= [product_definition] [product_definition_relationship] {product_definition_relationship.name = 'variance'}
#29 : version_ association_between_ objects to provision_ of_service_by_ material object (as predecessor)	PATH			product_definition_version <= product_definition_relationship product_definition_relationship.relating_product_definition -> product_definition => provision_of_service
#29 : version_ association_between_ objects to provision_ of_service_by_ material object (as successor)	PATH			product_definition_version <= product_definition_relationship product_definition_relationship.relating_product_definition -> product_definition => provision_of_service
#30: if version_ association_between_ objects to recognized_class_of_ resource_for_ material objects	product_definition_version	221		{product_definition_version <= product_category_relationship product_category_relationship.name = 'variance'}

Table 28 (– Mapping table variance_and_derivation UoF (uof22)) concluded

Application element	AIM element	Source	Rules	Reference path
#30 : version_ association_between_ objects to recognized_class_of_ resource_for_ material object (as predecessor)	PATH			product_definition_version <= product_category_relationship product_category_relationship.category -> product_category => product_related_product_category => recognized_class_of_resource
#30 : version_ association_between_ objects to recognized_class_of_ resource_for_ material object (as successor)	PATH			product_definition_version <= product_category_relationship product_category_relationship.category -> product_category => product_related_product_category => recognized_class_of_resource
#31: if version_ association_between_ objects to recognized_class_of_ service_for_facility objects	product_definition_version	221		{product_definition_version <= product_category_relationship product_category_relationship.name = 'variance'}
#31: version_ association_between_ objects to recognized_class_of_ service_for_facility object (as predecessor)	PATH			product_definition_version <= product_category_relationship product_category_relationship.category -> product_category => product_related_product_category => recognized_class_of_service
#31 : version_ association_between_ objects to recognized_class_of_ service_for_facility object (as successor)	PATH			product_definition_version <= product_category_relationship product_category_relationship.category -> product_category => product_related_product_category => recognized_class_of_service